WILLIAM JAMES

SCIENCE, TRUTH AND RELIGION

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DECLARATION

I hereby declare that the work contained in this thesis has been entirely composed by me.

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ABSTRACT

This thesis argues that William James's view of science is crucial for an understanding of his position on such philosophical questions as truth and religious belief. It attempts to show how he assimilated certain doctrines of science, in particular, positivist science, within his pragmatic philosophy. The aim throughout is to show how his views on such fundamental questions can be better understood and evaluated.

This thesis is divided into three parts. Part One is an exploration of the main elements of James's view of science. The discussion includes an examination of James's account of scientific method and his stance on such concepts as hypothesis, scientific theories and laws. Part Two examines James's theory of truth. It attempts to show how his theory of truth can be formulated in terms of two conditions, those of verifiability and satisfactoriness, of which the latter is contingent on the former. Part Three is an analysis of the main characteristics of James's philosophy of religion. It investigates his treatment of questions relating to religion from his pragmatist standpoint.

INTRODUCTION

William James (1842-1910) is known as a scientist, psychologist, and philosopher. His scientific training began at Harvard's Lawrence Scientific School, where he graduated M. D. in 1869, having studied chemistry, anatomy, natural history and physiology. In 1872, he started his career at Harvard, where he would stay until his retirement in 1907, as a teacher of anatomy and physiology. In 1875 he began teaching psychology and in 1879 he taught his first philosophy course. When James turned from his early career in science to psychology and philosophy, his scientific outlook was already embedded in his approach to the new disciplines. The high point of his years of teaching psychology was the publication in 1890 of his classic *The Principles of Psychology.* James openly declared this book as scientific psychology; a study of psychology from the point of view of positivist science. This he considered his original contribution to the subject.

Since his early encounters with science in the 1860s, at the start of his scientific education, James had been aware of the power and authority of science and its dominance at almost every level of American culture. The special status that science

had attained was due, undoubtedly, to its methods and the success it had enjoyed. James also witnessed the recognition of many of his contemporaries of the boundless capacity of scientific method to solve problems.

Such was the power and authority of science that one wished to be taken seriously, had to come to terms with its nature. Philosophers, naturally, were among those who sought most eagerly to come to terms with the conclusions of science in order to make their philosophical outputs legitimate, and James was no exception. He writes:

> [P]hilosophy like Molière, claims her own where she finds it. She finds much of it today in physics and natural history, and must and will educate herself accordingly.[1]

James was aware of the challenges that the work of Charles Darwin (1809-1882) on evolution and natural selection[2] had presented to both science and religion. He realised that the proofs of Darwin's views were open to debate. This led him to hold such claims as those that scientific theories were not absolutely certain but probable; thereby questioning the very ability of science to achieve certainty.

Darwin's theories sparked major conflict between science and religion concerning the origin of humans and their place in the universe. While a student at Harvard, James noted the heated debates on Darwinism between two of his teachers. On one side, there was the geologist and zoologist, Louis Agassiz (1807-1873), who is described as an idealistic thinker who would not hesitate to refer to a species as "a thought of the Creator."[3] Agassiz was against Darwin's transmutation hypothesis, insisting on the immutability of species. Darwin's theories, he argued, were lacking in certainty. On the other side, the botanist Asa Gray (1810-1888) accepted the general thrust of

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[1]James, LWJ, I, 191.
[2]Darwin, *On the Origin of Species,* published in 1859.
[3]Russett, *Darwin in America,* 9.

Darwin's arguments and foresaw that Darwinism would be accepted before it could be proved. He described himself as a strict empiricist, who further held that natural selection is consistent with theism.[4] Darwin's ideas were also a topic of continual debate among the members of a discussion group at Cambridge of which James was a member, the Metaphysical Club.[5] Among its members, who were students or graduates of Harvard, were Chauncy Wright (1830-1875), whom James describes as the 'arch-exponent of positivism'[6], and Charles Sanders Peirce (1839-1914) whose intellectual and personal friendship with James was to last throughout his life.

Hence, James's early encounters with science took place in an atmosphere of intense debate over Darwinism which played a role in influencing his approach to science.[7] He became convinced that the truths of science were provisional and could only be probable but not certain. Their great value, he says, is in their "setting naturalists to work, and sharpening their eyes for new facts and relations." [8] They are "doubtless, provisional, but none the less serviceable for that."[9]

Having adopted this view of the lack of certainty of scientific knowledge, James was impatient with arrogant advocates of science, like T. H. Huxley (1825-1895) who granted to scientific truths a high degree of certainty and who used science as the arbiter in the settlement of all questions. For such scientific writers, James tells us,

> every piece of writing is good whose pages are speckled over with words like "body," "ganglion-cell," "brute ancestor," "visceral emotion,"

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[4]Russett, *Darwin in America,* 9-10.
[5]See Wiener, *Evolution and the Founders of Pragmatism,* Chapter Two, 18-30.
[6]Perry, I, 522.
[7]On the influence of Darwin on James, see Wiener, 'Darwinism in James's Psychology and Pragmatism', in *Evolution and the Founders of Pragmatism,* Perry, *The Thought and Character of William James,* 2 vols., Croce, *Science and Religion in the Era of William James* and Levinson, *Science, Metaphysics, and the Chance of Salvation.*
[8]James's review of Darwin's *The Variation of Animals and Plants under Domestication* (1868) in ECR, 235.
[9]James, ECR, 235.

> whilst the sight of a term like "soul," "design," or "free will" in a book affects them with a sort of foaming at the mouth.[10]

Hence, we find James more appreciative of the approach to science that he encountered, for example, in the work of the British scientist and philosopher W. S. Jevons (1835-1882) who argued that scientific theory is only probable but never certain.[11] James developed a similar view of scientific theories and laws; holding that laws are only approximations, that no theory is an absolute transcript of reality and that subjective qualities such as simplicity, elegance and usefulness play a role in theory choice. These aspects of James's interpretation of science are the topic of Part One, in which James's theory of scientific method and his philosophy of science are explained.

The notion of science of the kind briefly outlined, to which James has been taken to be committed, has largely shaped the form of pragmatism that he later adopted. An attempt is made in the second part of the thesis to examine this influence in the course of the discussion of James's theory of truth. His account of truth, it is argued, is distinguished by the following main features:

(1) an opposition to the copy theory of truth which regards truth as a relation of agreement between ideas and reality, whereby ideas literally depict or copy the realities to which they refer;

(2) an alternative empirical account of truth as agreement between ideas and their objects in terms of two conditions of verifiability and satisfactoriness;

(3) an account of truth that incorporates both notions of objective truth and subjective truth, whereby James starts from a subjective notion of truth, truth for the individual, and seeks to develop a notion of objective truth.

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[10]James's review of *Revue Philosophique de la France et de l'Étranger,* edited by Théodule Ribot (1876) in ECR, 319.

[11]James's review of Jevons's *The Principles of Science,* in ECR, 290.

In the treatment of James's theory of truth, the reading is on the whole sympathetic and mainly concerned with the interpretation of his ideas. Some standard interpretations of his account and replies to some standard criticisms are, however, considered.

James although by training and temperament a scientist, also had a strong religious sensibility. He was not prepared to sacrifice one for the other and was conscious of the challenge of Darwinism to religion. He accepted Darwin's views as probable and yet he acknowledged that they conflicted with religion. Many scientists and theologians, and ordinary people, shared James's worries, especially those who thought that the advances of science could only support religious truths; the findings of natural scientists, some held, would reinforce the revelations of Scripture. Others, however, identified Darwinism with Atheism.[12]

James had a genuine sympathy for religion which remained with him throughout his life and played a major role in the shaping of his philosophical thinking. The threat of Darwin's views to theism did not lead him into the camp of those thinkers who announced the death of religion, nor into the camp of those who claimed that the threat of Darwin to religion was unreal and overly estimated.

The task of reconciling science and religion preoccupied James throughout his scholarly life. In Part Three of the thesis, an attempt is made to examine James's efforts to achieve that goal. For this reason, James's treatment of the questions of religion calls for attention. The main focus is on the exploration of how he dealt with the problem of providing justification for religious beliefs.

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[12]Among those who defended this position was Charles Hodge, who was a Professor at Princeton Theological Seminary, which William's father Henry James, Sr. attended. See Russett, *Darwin in America,* 26.

Some major distinguishing features of James's treatment of religion are now outlined.

(1) The existence of God, like every statement of fact, is only probable, though the degree of probability in his case may be high.

(2) If the hypothesis of God, like any other scientific hypothesis, is to be said to 'work', it must satisfy the two conditions of verifiability and satisfactoriness. It must "combine satisfactorily with all the other working truths."[13] It must also be verified whereby its verification requires the experience of the entire human race and thus will not be completed until the very last person has had his say.

(3) The rejection of the attempt to establish the nature and existence of God by logical proofs. These proofs, James argues, do not touch life; they are too remote to relate to human beings' deepest aspirations. Hence he encouraged, and indeed argued for, the recourse to the experience of God in the individual conscience as a source of belief.

The discussion of James's account of religion focusses on these major features and on some others, such as his attempt to establish a 'science of religions'.

The thesis concludes with an assessment of James's attempt to incorporate scientific insights into truth and religion as described in the course of the thesis and briefly charts some indications of areas of research of the extent to which James's pragmatic philosophy had influenced Niels Bohr's philosophy of complementarity.

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[13]James, PRAG, 143.

PART ONE: SCIENCE

1. INTRODUCTION

Throughout his writings, James had shown a steady support for science, evolutionary and positivistic. He argued for variants of his philosophical positions from within a scientific model. Hence, it can justifiably be maintained that it is crucial for any attempt to understand James's philosophical views to gain a clear grasp of his views on science; this having exercised such an influence on shaping his philosophy. From a close look at the literature on James, one observes that remarkably little has been written about his theory of scientific method and his philosophy of science. One can hardly find a detailed study of James's account of such concepts as hypothesis and of scientific theories, theoretical entities and laws. In her fairly recent study of James, Seigfried points out the difficulty of giving an account of what James exactly means by science and its methods. She remarks that

> his initial education in science placed him in a favorable position to evaluate it, both as a participant and as a critic. However, this does not make it any

> easier to recognize what he meant by science, which must be derived from scattered references.[1]

The present account of James's view of science exemplifies, in one aspect, this difficulty. It is based, indeed, on scattered references and a number of clues sprinkled throughout James's writings. Hence, it proved essential, whenever it seemed appropriate, to compare James's ideas, especially those that seemed vaguely formulated, with those which appeared relevant in the works of other philosophers, in particular with those philosophers who had exerted a considerable influence on him. Those who were influenced by him have been given less attention. The aim throughout is to examine James's ideas by seeking new insights into his thought rather than to offer the reader a review of the history of ideas.

It is important to point out at this stage that no attempt has been made to offer a detailed examination of Darwin's influence on James's thought. The studies that cover this topic are numerous enough, some of which are indeed so competent, that an examination of them in the course of this discussion would seem to have little of significance to add.

Among the topics discussed in this part of the thesis are the following:

(1) James's views on the use of hypotheses in scientific inquiry;

(2) the Baconian method and James's reaction to it;

(3) James's views on theoretical terms and the status of scientific theories;

(4) the influence of Duhem's holism on James;

(5) James's position towards positivist science and its method.

The examination of James's view of science is summed up at the end and followed by some concluding comments.

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[1]Seigfried, *William James's Radical Reconstruction of Philosophy,* 53.

2. ON THE ROLE OF HYPOTHESIS

2.1 THE ORIGIN OF HYPOTHESIS AND ITS CHARACTERISTICS

Like other scientists of his time, James strongly stressed the value of hypothesis as an integral part of inductive investigation. He conceives the origin or genesis of hypotheses as sudden and spontaneous. The origin of scientific hypotheses is akin to that of 'flashes of poetry and eloquence' and 'sallies of wit and humor.'[2] He tells us that hypotheses can neither be deduced nor induced from matters of fact. They are

> originally produced in the shape of random images, fancies, accidental out-births of spontaneous variation in the functional activity of the excessively instable human brain, which the outer environment simply confirms or refutes, adopts or rejects, preserves or destroys.[3]

But what makes an hypothesis a good one? James tells us that: "A good hypothesis in science must have other properties than those of the phenomenon it is immediately invoked to explain, otherwise it is not prolific enough."[4] Thus, a probable hypothesis is one which enables the investigator to infer the existence of new phenomena which occur within his experience. If one was not able to deduce any further facts that would occur if the hypothesis proved to be true, then the role of this particular hypothesis is limited, it can be argued, to only offering an explanation of the phenomena already known.

The one condition that James seems to lay down as an essential requirement of a good hypothesis is that of deducibility, which enables the investigator to know what

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[2]James, WB, 185; also PP, II, 1232 & 1233. Karl Popper also describes scientific hypotheses as "the *free* creations of our own minds, the result of an almost poetic intuition." Popper, *Conjectures and Refutations,* 192.
[3]James, WB, 184.
[4]James, VRE, 407.

should happen if the hypothesis was true. Consequently, James does not object to the scientist's consideration of all conceivable hypotheses relevant to his investigation no matter how bizarre some of them might at first appear, so long as they are fertile.

James does not seem to lay down any other conditions, or constraints, to which hypotheses must conform. For instance, one does not find a condition that if one is to formulate or devise an hypothesis in physics it should not break the laws of conservation of energy. Similarly, if an hypothesis is invented in chemistry, there is no restriction that it must be verified using a certain empirical measuring device. The role of hypotheses is to explain phenomena and to predict other phenomena which are not already under observation.

James tells us that once formed, "[t]he scientific hypothesis arouses in me a fever of desire for verification."[5] He reports and praises W. Stanley Jevons for stressing this point.

> To Professor Jevons is due the great credit of having emphatically pointed out how the genius of discovery depends altogether on the number of these random notions and guesses which visit the investigator's mind. To be fertile in hypotheses is the first requisite, and to be willing to throw them away the moment experience contradicts them is the next.[6]

Thus, an hypothesis must be verifiable. The facts of experience are the test by which the truthfulness of an hypothesis is judged. The investigator starts with a probable hypothesis from which he deduces some consequences that he puts to the test. If they harmonise with experience then this shows that the scientist's own speculations are being confirmed - though not finally confirmed. However, if they did not, then either

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[5]James, WB, 186. For James, the term 'verification' denotes something like confirmation rather than *exhaustive* or strong verification. He used verification in the weaker sense; in the sense of partial confirmation.
[6]James, WB, 185.

the hypothesis would be abandoned or modified and subjected to testing again. The scientist cannot start his inquiry, according to James, without a presupposed theory or hypothesis. For scientific observation assumes theory. It is hardly to see how science would progress without hypothesis or theory.

2.2 JAMES AND THE BACONIAN METHOD

In his *Novum Organum*, Francis Bacon presented a scientific method the application of which he thought was essential to the progress of science. According to the Baconian method, the scientist starts his inquiry by gathering facts. The compiled facts or 'histories' are infallibly drawn from direct observation. Then, with the set of rules which can easily be applied, successive general laws can be derived. In this way, a whole system of knowledge can be established which is both certain and infallibly true. The investigator, according to Bacon, should not have recourse to flashes of inspiration or speculative hypothesis in his search. The investigator's mind, he says, should "not [be] left to take its own course."[7] Hence, Bacon was understood by many as opposed to the use of hypothesis and speculation in scientific investigation.[8] Karl Popper, for one, argued, against Bacon, that bold conjectures or anticipations are crucial to the progress of science; that the theories we formulate are not infallible; that the starting-point in inquiry is not the gathering of facts but bold hypotheses and conjectures which are subjected to empirical testing. None of these hypotheses, Popper argues, is maintained dogmatically. He says: "Our method of

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[7]Quoted from Bacon, *Works IV,* 40 in Urbach, *Francis Bacon's Philosophy of Science,* 18.
[8]Since James's references to Bacon's work are very few, the discussion of it here is rather sketchy. Any further examination of Bacon's ideas might seem somewhat irrelevant to the present examination of James's comments on the Baconian method.

research is not to defend them, in order to prove how right we were. On the contrary, we try to overthrow them."[9]

Whether these estimates of Bacon's philosophy were accurate, is not a major concern here; many did adopt this reading throughout the eighteenth-century. The main intention is to examine James's view of the Baconian method. It can be said that James seems to be on the side of Popper, among others, in being critical of the Baconian method. He writes:

> The Baconian method of collating tables of instances may be a useful aid at certain times. But one might as well expect a chemist's note-book to write down the name of the body analyzed, or a weather table to sum itself up into a prediction of probabilities of its own accord, as to hope that the mere fact of mental confrontation with a certain series of facts will be sufficient to make *any* brain conceive their law. The conceiving of the law is a spontaneous variation in the strictest sense of the term. . . . the important thing to notice is that the good flashes and the bad flashes, the triumphant hypotheses and the absurd conceits, are on an exact equality in respect of their origin.[10]

It seems rather difficult to imagine how the simple gathering and the classification of a mass of factual data are likely to disclose the general laws they embody. James's view is that the mode of reaching the general law, or attribute shared by a concrete collection or group of phenomena, is not achieved by the Baconian-inspired compilation of disconnected facts. It is always achieved by a guess or an hypothesis, which is then confronted by the facts, old and new, which would be made as a result of this confrontation less or more probable, but 'never certain.'[11] For it is more likely that some other hidden feature or character of that phenomena might be revealed in the future by some clever observer, or that an instance might be discovered which would contradict that law. It seems somewhat difficult to imagine, from James's

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[9]Popper, *The Logic of Scientific Discovery,* 279.
[10]James, WB, 185-86.
[11]James, ECR, 290.

point of view, how scientific discoveries can be reached by following the Baconian method.

James gives the following formulation of the method that the physical philosopher follows in testing an hypothesis.

> He [the scientist] deduces from the hypothesis an experimental action, *x;* this he adds to the facts *M* already existing. It fits them if the hypothesis be true; if not, there is discord. The results of the action corroborate or refute the idea from which it flowed.[12]

This simple formulation of scientific method, or induction, can be briefly described as consisting of the following three steps:

(1) the formulation of an hypothesis about the nature of a general law;

(2) the deduction of some consequences from it;

(3) the comparison of the consequences with the facts which are the subject of examination.

2.3 THE ROLE OF THE INQUIRER

What seems to lie at the heart of the matter is James's unwillingness to ignore the active role that the scientist plays as a transformer of experience. In contrast with traditional inductivists like Bacon and Reid, James insists that the scientist is not a passive observer of nature; a mere recipient of empirical data, who gradually absorbs and eventually generalises the facts that he has assimilated.[13] On the contrary, the

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[12]James, 'The Sentiment of Rationality' in WB, 86.

[13]James expresses this point clearly as follows. "For a hundred and fifty years past the progress of science has seemed to mean the enlargement of the material universe and the diminution of man's importance. . . . Man is no lawgiver to nature, he is an absorber. She it is who stands firm; he it is who must accommodate himself. Let him record truth, inhuman tho it be, and submit to it!" PRAG, 15.

scientist functions as an active participant whose reasoning is guided from the start of inquiry by subjective or personal interest, but inspired by a fertility of imagination and an abundance of hypotheses and guesses. James writes:

> Take science itself! Without an imperious inner demand on our part for ideal logical and mathematical harmonies, we should never have attained to proving that such harmonies lie hidden between all the chinks and interstices of the crude natural world. Hardly a law has been established in science, hardly a fact ascertained, which was not first sought after, often with sweat and blood, to gratify an inner need. Whence such needs come from we do not know: we find them in us.[14]

This appears to be only one way in which James describes the intervention of subjective interests in the process of scientific discovery. Given the active role of the inquirer, James argues in his writings for a more exact and also significant role for subjective factors in science. Here we can distinguish between two strands in James's scientific thought which represent this influence. One finds firstly, the multiplicity of scientific formulae that may account for the same phenomenon. Secondly, an employment of subjective criteria when choosing between rival theories. These will be explored in the following chapters.

3. MULTIPLICITY OF SCIENTIFIC FORMULAE

3.1 SCIENTIFIC LAWS ARE NOT EXACT TRANSCRIPTS OF FACTS

James argues that the implications of his conception of the way we arrive at the formulation of scientific laws suggest that these laws cannot be mere copies of facts. Thus, it is neither impossible nor unthinkable that the same phenomenon can be

[14]James, WB, 51.

accounted for by more than one law. James tells us that this view has been arrived at by the radical change that occurred in our conception of scientific truth after 1850. Prior to that, he argues, scientific truths were supposed to be

> exact and exclusive duplicates of pre-human archetypes buried in the structure of things, to which the spark of divinity hidden in our intellect enables us to penetrate.[15]

For the scientific investigator sciences expressed "truths that were exact copies of a definite code of non-human realities."[16] But after 1850, there has emerged a multiplicity of geometries, of logics, of scientific hypotheses, each one of them is 'good for so much and yet not good for everything' that the conception of a theory or a law that is a literal transcript of reality seems to be somewhat impossible to maintain. Consequently, our conception of scientific truths has become more flexible and so should it be in the case of other types of truth.

> Truth we conceive to mean everywhere, not duplication, but addition; not the constructing of inner copies of already complete realities, but rather the collaborating with realities so as to bring about a clearer result. Obviously this state of mind is at first full of vagueness and ambiguity. 'Collaborating' is a vague term; it must at any rate cover conceptions and logical arrangements. 'Clearer' is vaguer still. Truth must bring clear thoughts, as well as clear the way to action. 'Reality' is the vaguest term of all. The only way to test such a program at all is to apply it to the various types of truth, in the hope of reaching an account that shall be more precise. Any hypothesis that forces such a review upon one has one great merit, even if in the end it prove invalid: it gets us better acquainted with the total subject. To give the theory plenty of 'rope' and see if it hangs itself eventually is better tactics than to choke it off at the outset by abstract accusations of self-contradiction.[17]

As said earlier, the advancement of science in the nineteenth-century had shown that the same phenomena could be explained by different formulae, as laws were no

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[15]James, MT, 40.
[16]James, MT, 40.
[17]James, MT, 41-42.

longer considered as mere copies of facts. James acknowledged this development of the way scientific laws are understood. He develops a similar argument to the effect that there is a multiplicity of viewpoints from which the world can be seen and no one viewpoint can be deemed to be the truest one.

> There is nothing improbable in the supposition that an analysis of the world may yield a number of formulæ, all consistent with the facts. In physical science different formulæ may explain the phenomena equally well—the one-fluid and the two-fluid theories of electricity, for example. Why may it not be so with the world? Why may there not be different points of view for surveying it, within each of which all data harmonize, and which the observer may therefore either choose between, or simply cumulate one upon another? A Beethoven string-quartet is truly, as someone has said, a scraping of horses' tails on cats' bowels, and may be exhaustively described in such terms; but the application of this description in no way precludes the simultaneous applicability of an entirely different description. Just so a thorough-going interpretation of the world in terms of mechanical sequence is compatible with its being interpreted teleologically, for the mechanism itself may be designed.[18]

3.2 THE NATURE OF SCIENTIFIC LAWS

Taking into account James's view that scientific laws are not literally objective and do not depict reality literally, the following claims by James seem to follow.

(1) That many competing conceptual frameworks may explain empirical phenomena.

(2) That different existing and competing formulae can not be reduced to one for even if they are reduced to one another they are not ultimately reduced to one.

(3) That scientific laws are only approximations. They do not depict nature, they only symbolise it. The talk about symbolising means the insistence on the mathematical form of physical laws. Thus laws do not provide an absolutely literal and definitive picture of reality, they merely offer a relative and approximate formula of reality which is subject to possible revision in the future.

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[18]James, 'The Sentiment of Rationality' in WB, 66.

(4) That it is not correct to talk about laws as true,[19] in the sense of being absolutely true.

(5) That the choice between rival formulae or laws when, and only when, it cannot be made on empirical or logical grounds, is made by appealing to subjective criteria. A scientific formula which is judged the best among its rivals, according to subjective criteria, is considered as so for the time and other formulae which are judged as not useful at that time might become so and be adopted as the best ones in the future. Accordingly, James views laws as heuristic devices any one of which might be useful at a given time. Therefore none of them could be regarded as absolute for that reason. Each cannot be an absolute transcript of reality, but any one of them may from some point of view be useful.

In *Pragmatism,* James refers to a group of mathematicians, physicists and chemists, including Henri Poincaré (1854-1912), Ernst Mach (1838-1916) and Pierre Duhem (1861-1916), who developed a branch of philosophy called inductive logic. The most important view advocated by these scientists is that laws are approximations. James approvingly describes the efforts of these scientists.

> One of the most successfully cultivated branches of philosophy in our time is what is called inductive logic, the study of the conditions under which our sciences have evolved. Writers on this subject have begun to show a singular unanimity as to what the laws of nature and elements of fact mean, when formulated by mathematicians, physicists and chemists. . . . as the sciences have developed farther, the notion has gained ground that most, perhaps all, of our laws are only approximations. The laws themselves, moreover, have grown so numerous that there is no counting them; and so many rival formulations are proposed in all the branches of science that investigators have become accustomed to the notion that no theory is absolutely a transcript of reality, but that any one of them may from some point of view be useful. Their great use is to summarize old facts and to lead to new ones. They are only a man-made language, a conceptual shorthand,

[19]For example, Carnap writes: 'Many empiricists . . . feel that an empiricist should never use a terribly dangerous word like "true" [when talking about scientific laws]. Otto Neurath, for instance, said that it would be a sin against empiricism to speak of laws as true. American pragmatists, including William James and John Dewey, held similar views.' *Philosophical Foundations of Physics,* 213-14.

> as someone calls them, in which we write our reports of nature; and languages, as is well known, tolerate much choice of expression and many dialects.[20]

The notion of laws as approximations, with which James clearly sympathises, carries with it certain characteristics of laws to which James does not explicitly refer. Let us refer to Duhem's view of laws in his book *The Aim and Structure of Physical Theory.* According to Duhem, to say that physical laws are approximations is to say that they cannot be either true or false.[21] For

> any other law representing the same experiments with the same approximation may lay as just a claim as the first to the title of a true law or, to speak more precisely, of an acceptable law.[22]

For laws of this nature, physical theories, whose role is the classification of the approximate laws, cannot "confer absolute truth on them."[23] James is also uneasy about speaking of physical laws as true. Since these laws do not depict reality he argues, they are not suited to the provision of an absolute picture of things. Thus, they are not absolutely true but only relative; representing reality in a more or less exact manner but in the most satisfactory possible way. Because laws are approximations, Duhem argues, they are provisional.[24] A law is provisional because it represents approximately the facts which scientists of the present consider as satisfactory. However, it may well be the case that this law will not be considered by scientists as such in the future. For instance, the improvement in conducting experiments which may lead to more accurate results, might make the laws under consideration unsatisfactory and require their revision. What it is extremely important to point out is that provisional laws since they are symbolic constructions,

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[20]James, PRAG, 33.
[21]Duhem, *Aim,* 168.
[22]Duhem, *Aim,* 171-72.
[23]Duhem, *Aim,* 171.
[24]Duhem, *Aim,* 172.

should they represent reality at one time, may not necessarily do so in the future. Characterised as such, physical laws can only be retained by being modified.

James differentiates between the proximate laws of nature on one side and scientific theories on the other. He writes:

> The most persistent outer relations which science believes in are never matters of experience at all, but have to be disengaged from under experience by a process of elimination, that is, by ignoring conditions which are always present. The *elementary* laws of mechanics, physics, and chemistry are all of this sort. The principle of uniformity in nature is of this sort; it has to be *sought* under and in spite of the most rebellious appearances; and our conviction of its truth is far more like a religious faith than like assent to a demonstration. The only cohesions which experience in the literal sense of the word produces in our mind are, as we contended some time back, the proximate laws of nature, and habitudes of concrete things, that heat melts ice, that salt preserves meat, that fish die out of water, and the like. Such 'empirical truths' as these we admitted to form an enormous part of human wisdom. The 'scientific' truths have to harmonize with these truths, or be given up as useless; but they arise in the mind in no such passive associative way as that in which the simpler truths arise. Even those experiences which are used to prove a scientific truth are for the most part artificial experiences of the laboratory gained after the truth itself has been conjectured.[25]

The distinction just mentioned between scientific truths and proximate laws of nature is based on their origin and not on the methods of verification. On the basis of their origin, the proximate laws of nature are regarded by James as empirical truths, which are the product of the outer environment, while theories, which James refers to as scientific truths, are considered as non-empirical, because they originate in the mind; being a mere production of the mind. As James indicates above, scientific truths must harmonise, with empirical truths. As examples of empirical truths, James gives the proximate laws of nature such as 'heat melts ice' and 'fish die out of water'. These laws are invented by human beings to enable them to interpret and organise their experiences successfully.

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[25]James, PP, II, 1233-34.

James also talks about 'simpler truths' which arise in the mind in a 'passive associative way'. These may be understood as those truths which arise out of common-sense experience. There seems to be a direct connection between the degree of abstractness of our ideas and the degree of passivity of our minds. The more our ideas become abstract, the less passive our minds are. Another point to be made is that the scientist approaches the data of experience with conjectures or theories that have already been formed. Thus the only way that the scientist could handle the empirical data is through scientific theories which are not derivable from experience. This would make theories science's *sine qua non.*

3.3 THE PRINCIPLE OF THE CONSERVATION OF ENERGY

Having examined James's view on scientific laws, it is interesting to see how he dealt with the principle of the conservation of energy (PCE) and to explore whether James's treatment of this principle is in accordance with his views of scientific laws as has been examined thus far.

In 1847, German physicist Hermann von Helmholtz (1821-1894), at the age of twenty-six, presented a paper entitled 'On the Conservation of Force,' unaware of the work of Mayer and Joule's experiments, where by he concluded that energy must have many different forms and be conserved in total amount. This conclusion was based on his belief that heat, light, electricity and so on are all forms of motion and therefore forms of mechanical (kinetic) energy. It must have seemed obvious to Helmholtz that kinetic energy was always conserved, not just in elastic collisions but in all collisions, because it went into other forms that were really also kinetic energy. Much of what Helmholtz so boldly suggested was eventually found to be correct,

although not all forms of energy can be reduced to kinetic energy. The immediate response to his paper was discouraging and most historians of science agree that it was the experiments of Joule, backed by the reputation and influence of Kelvin, that eventually convinced the physicists of the mid-nineteenth century that there was indeed a PCE. James went to Heidelberg in 1868 to study physiology and psychology with Helmholtz and Wundt.[26] Perry tells us that Helmholtz was one of James's 'scientific idols' who combined "experimental patience" with "skill and fresh ways of observation."[27] His afore-mentioned paper was for James "one of the great classics of science."[28] This admiration of Helmholtz remained only intellectual.[29]

The PCE (The First Law of Thermodynamics) is one of the most fundamental laws of science which is commonly stated as: The amount of energy in the universe is fixed or as: Energy can neither be destroyed nor created. Scientists who were positivists and determinists and who accepted the PCE and its universality, but who also found the psychological evidence in the existence of free will and the active power of mind on the body so compelling, were not prepared to give up any of these contradicting views and thus have come up with ingenious ideas on how to reconcile them. The Belgian mathematician and psychologist Delbœuf[30] tried to do exactly this.

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[26]Perry, I, 254.
[27]Perry, II, 55.
[28]Cf. PP (1891), II, 668 and Perry, II, 55.
[29]Perry notes James's failure to make any personal contact with Helmholtz. In one occasion where Helmholtz was invited to tea with the Jameses in Chocorua, James described him as a "'monumental example of benign calm and speechlessness,"—but he was "the great Helmholtz" none the less."' (Perry, II, 55. See also LWJ, I, 266, 347) In a letter to Carl Stumpf, dated January 24, 1894, James again describes Helmholtz's lack of conversation. "We had Helmholtz here, by the bye, in the autumn. A fine looking old fellow, but with formidable powers of holding his tongue, and answering you by a friendly inclination of the head." (Perry, II, 188) James describes one of Helmholtz's lectures which he attended in another letter to Stumpf, dated November 26, 1882, saying that "Helmholtz, for example, gave me the very worst lecture I ever heard in my life except one (that one was by our most distinguished American mathematician)." Perry, II, 60.
[30]Unlike Helmholtz, Delbœuf stands out in James's eyes as "an angel, and much the best teacher I've seen." LWJ, I, 217-18. Perry says that "Delbœuf was not unlike James in the warmth and liveliness of

In a series of articles on "Determinism and Freedom: Freedom Demonstrated by Mechanics"[31], Delbœuf attempts to prove, on the basis of Newtonian mechanics, the existence of discontinuous motions in nature whose existence is compatible with the law of conservation of energy. The existence of these discontinuous motions can only be explained by the concept of freedom. Thus he puts forward the idea that freedom is compatible with the law of the conservation of energy.

Delbœuf firmly believed that determinism is irrefutable, that freedom exists and that the PCE is universally valid. So how did he reconcile all these ideas? Delbœuf recognised that the major objection that he must overcome is that if free will exists, then it does create a new kind of energy which violates the law of conservation of energy.[32] He resolves this problem by suggesting that when one acts freely, one does not introduce a new amount of energy, one only chooses the time when energies already existing shall transfer to or from some physical source.[33] Thus no energy is created through the free action of the agent. The quantity of energy in the universe remains constant. So given that matter is conceived as being essentially a form of

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his temperament, and there was an instant affection which led to many years of friendly correspondence." Perry, I, 687.

[31]Delbœuf, J., "Déterminisme et Liberté: La Liberté Démontrée Par La Mécanique", *Revue Philosophique* XIII, 453-480, 608-638, 1882, XIV, 156-189, 1882.

[32]"En d'autres termes, l'excercice de la liberté, si la liberté existe, implique-t il une création de force?

John Herschell, entre autres, l'a pensé. Il dit en quelque endroit qu'on est bien forcé d'avouer que la force peut être créée à nouveau, et, partant, de n'accorder au principe de la conservation de l'énergie que la valeur d'une loi approximative.

Hàtons-nous de donner une réponse négative à la question.

Scientifiquement parlant, il nous est tout aussi impossible de concevoir une création de force qu'une création de matière. Les corps animés, aussi bien que les corps inanimés, sont incapables de créer le mouvement. Leurs déplacements, et les déplacements qui en résultent pour les autres corps, s'expliquent par une simple transformation ou un simple transport de forces." Delbœuf, I, 478-79.

[33]"Ou l'homme a ce pouvoir, ou il n'est pas libre. Ce résultat, comment peut-il l'atteindre sans compromettre la loi de la conservation de l'énergie? en disposant du temps." Delbœuf, I, 480. And again "Mais, s'il était nécessaire d'accorder à la volonté une part d'action sur les choses, il était impossible d'admettre qu'une force nulle pût, à l'aide d'aucun mécanisme, produire un effet quelconque. Quelle puissance restait-il donc à mettre à la disposition des êtres libres? Une seule, le temps. Agir librement, c'est suspendre son activité." Delbœuf, III, 188.

energy, then the free act of the agent is restricted to choosing the time of intervention which does not create energy, or at least potentially does not create matter.[34]

This claimed compatibility between the PCE and freedom assumes the existence of discontinuous movements which Delbœuf takes as free motions. In fact, he argues, all free movements are discontinuous.[35] He insists that his recourse to freedom to explain discontinuous motions[36] does in no way cast any doubts on his part surrounding determinism. On the contrary, as has been said earlier, he firmly holds that determinism and its relationship to science is irrefutable. Science obliges us to have recourse to freedom to explain discontinuous motions,[37] given that discontinuities cannot be explained scientifically.

James refers to Delbœuf's articles in the correspondence between himself and Charles Renouvier[38] (1815-1903) and in a letter to C. A. Strong in which James

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[34]"le libre arbitre n'a rien à voir avec le principe de la conservation de l'énergie. Qu'on le veuille ou qu'on ne le veuille pas, la quantité d'énergie reste nécessairement la même. . . . Libres ou non, l'homme et les animaux ne font que convertir sans cesse du transformable en intransformable; ils précipitent le cours les choses. . . . Il est possible, il est même probable que les pensées et les sentiments et les volontés sont accompagnés d'une dépense d'énergies; mais le principe de la conservation de l'énergie n'est nullement intéressé dans la question de la liberté."Delbœuf, II, 617-18.

[35]"Il y a donc certainement des mouvements discontinus, et ce sont précisément des mouvements volontaires. Nous pouvons en inférer que tous les mouvements volontaires sont discontinus."Delbœuf, II, 634.

[36]See the discussion on the existence of discontinuous movements in Delbœuf, J., II, 631-34.

[37]"A la science de la nature se substitue la recherche de la pensée et de la volonté créatrices. Cette pensée d'ailleurs et cette volonté sont immuables et éternelles comme les lois de la matière. Au point de vue exclusif où je me suis placé, je n'ai pas à critiquer ce système, que je déclare irréfutable. Il me suffit d'avoir montré que la science est obligée de recourir à la liberté pour expliquer les mouvements discontinus." Delbœuf, II, 638.

[38]Renouvier had a strong influence on James, especially on the his doctrine of the will to believe and the question of free will and determinism. Renouvier was James's philosophical healer. His frustration that led to the well-known crisis in 1869 referred to in Perry that "we are nature through and through. . . . " was fundamentally cured by his reading of Renouvier's Second Essay in 1870, when Renouvier's doctrine of freedom gave James hope and courage and vision that he desperately needed to overcome his fears of ultimate succumbing to the evils of materialism. James has also dedicated his posthumously published book *Some Problem of Philosophy* to Renouvier wherein he refers to him as "one of the greatest philosophic characters" whose well advocated pluralism saved James from the spell of his father's 'monistic superstition.' Perry regards Renouvier's influence to be the greatest "individual influence" upon the development of James's thought.

recommends to him Delbœuf's work on freedom.[39] But what does James think about Delbœuf's thesis? Both James and Renouvier agree that freedom and discontinuity go together, just as determinism and continuity belong together.[40] So the appearance of discontinuity could not be explained in a system of continuity. James writes:

> Defining discontinuous movements as he [Delbœuf] does, I see that we must have such a movement whenever a force hitherto inactive begins to act; and I think I see that the existence of *apparent* discontinuity cannot be explained away by an appeal to absolute motion in which the discontinuity shall disappear; for there must be *some* action *ex abrupto* even in the absolute movement to cause the *appearance* of discontinuity in the relative movement. But whether all this means the same thing as indeterminism I can't tell. . . . After all, pluralism and indeterminism seem to be but two ways of stating the same thing.[41]

Renouvier is rather unsympathetic to Delbœuf's thesis. Writing back to James, he says:

> I would not say with Delbœuf that determinism is "an irrefutable logical system." . . . As to the chief point of his thesis, I do not understand how he can say that the law of the conservation of energy remains intact and absolute, provided only the agent disposes freely of time—in choosing his moment of action. Is it not always necessary that, at the moment when he decides to intervene, he should introduce in the system of given motions whatever new motion is necessary to change their actual relations? No, I can make nothing of it.[42]

Let us now examine these responses to Delbœuf's thesis. Both Renouvier and James seem to hold that freedom is incompatible with determinism. They both oppose freedom and necessity as mutually exclusive.

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[39]Perry, II, 26.
[40]"Continuity (or infinity of composition, and, in consequence, of action) and necessity or solidarity, are, again, for me the same thing; just as freedom and discontinuity belong together, as you have so well said." Renouvier's letter to James, dated December 28, 1882, in Perry, I, 689.
[41]Perry, I, 686.
[42]Letter to James, dated December 28, 1882, Perry, I, 689-90.

Renouvier discusses freedom in relation to the will, which is the foundation of liberty, to certitude, of which freedom is its foundation and in relation to indeterminism. As far as freedom's relation to will is concerned, his position is a compromise between the positions of the determinists and the indifferentists, who hold the doctrine of the so-called freedom of the indifference. According to Renouvier, these doctrines are based on the concept of a separable will which is detached from the representations in which it is manifested. This separable will must be conceived as entirely indifferent to any motives or any decision the agent might make. Thus, the determinists, as against the indifferentists, take the willing as the moment of preponderance of one motive over others, where the pure will is being taken by a mathematical point and the notion of a balance of motives is introduced.[43]

Renouvier does not find this detached conception of freedom acceptable. He characterises freedom as follows:

> La liberté que nous pouvons admettre est ce caractère de l'acte humain, réfléchi et volontaire, dans lequel la conscience pose étroitement unis le motif et le moteur identifiés avec elle, en s'affirmant que d'autres actes exclusifs du premier étaient possibles au même instant. Cette possibilité, apparente ou réelle d'ailleurs, est le titre le plus net de la liberté, l'élément le plus clair de sa définition.[44]

Thus Renouvier talks about the identification of the motive and the motor and consciousness at the moment of the exercise of will. He also talks about the free acts as being caused by humans.

> Les actes libres ne sont pas des effets sans cause ; leur cause est l'homme, dans l'ensemble et la plénitude de ses fonctions.[45]

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[43]Renouvier, *Essai* II, 60-73.
[44]Renouvier, *Essai* II, 73-74.
[45]Renouvier, *Essai* II, 86-87.

Renouvier argues against determinism that if one did not admit the existence of one motive of which will is an element, then this particular motive is in fact a willed motive which stands equally possible to other motives.[46] This, he argues, should upset the determinist argument. But, we should try to understand how does the will enter as an element into a motive. According to Delbœuf, the agent acts and is acted upon according to physical laws. Renouvier's objection is that it is incorrect to subject the agent's free acts to law that would involve a kind of necessity because, for him, laws mean necessity.[47] To try to clarify this, Renouvier seems to be against holding free will while at the same time holding to the universality of law and uniformity in nature. Free will is to be based upon a real contingency or indetermination. But his theory of free will is even more bizarre. According to him, when the will or freedom enters into a motive as an element, what happens is that an agency starts a new series of events in the world which appears in the form of a self-caused representation.[48]

There are certain complex ideas here which are best set on one side. What is important for us is the fact that this explanation of the will is intended to avoid any incompatibility with the PCE by basing freedom on real contingency or indetermination. Thus we find Renouvier rejecting Delbœuf's thesis of the compatibility between freedom and the PCE. Renouvier draws the distinction between two senses of freedom; freedom from law and freedom from coercion. An act of choice is always free from coercion, for the choice implies freedom. On the other hand, this act is not free from law, which is determined by the agent's nature and his surroundings. But the act of choice is considered as part of a chain of

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[46]Renouvier, *Essai* II, 71.

[47]"qui dit loi entend nécessité. Rien de plus vrai et de plus légitime." Renouvier, *Essai* II, 83.

[48]*"Le motif prépondérant détermine la volonté,* on essaie d'introduire un énoncé à termes pleins et synthétiques, on trouve: *L'état formé de passion, d'intelligence et de volonté, duquel fait partie la représentation d'un motif jugé capable de déterminer un acte subséquent, détermine effectivement ce dernier acte. . . . La volonté est à elle-même son motif."* Renouvier, *Essai* II, 72.

conditions and what we are doing is to abstract it at the moment of choice which makes this act to appear to be free in every sense, even from law. At this moment that the agent chooses to begin to act depends the sense of freedom that he feels, which in this case is real freedom. His lack of knowledge of the law enables him to feel his own energy, which obeys the law, not as law but as energy. This sense of freedom is a sense of power; it increases the force of the will in choosing the best course. Here real freedom is contrasted with apparent freedom (the mere belief in real freedom) which is complementary to it. Real freedom, Renouvier tells us, just as the doctrine of determinism is not logically demonstrable.[49]

Returning to the initial problem, namely, the compatibility or lack of it of the PCE with freedom, as has just been discussed, Renouvier's remarks are basically a separation of freedom from the PCE. What is now of concern is the examination of James's reaction to this problem.

James follows Renouvier in thinking that it seems rather absurd either to admit that in the free act a new energy is created or to deny freewill in favour of PCE. However, the choice between either view, freedom and determinism, is unavoidable; we must choose one or the other and we cannot decide not to choose either. For although in some issues one can suspend judgement, which seems the right thing to do, in other issues the consequences of the suspension of judgement are disastrous. In this sense one is forced to choose one or the other. As said earlier, this matter of choice cannot be decided on intellectual grounds for both doctrines are logically indemonstrable. But if one is forced to make the choice, then on what grounds can it be made? Renouvier tells us that one is entitled to choose according to the kind of consequences that would follow from choosing either doctrine. One must choose

[49]We return to this theme in Part Three when we examine James's essay 'The Will to Believe.'

freedom because the advantages that accompany the belief in freedom far exceed those that a belief in determinism promises.

> Dans l'impuissance de rien démontrer, l'unique ressource qui reste est d'affirmer la liberté à titre de postulat. La vérité, non pas prouvée, mais réclamée et digne d'être choisie, est celle qui pose un fondement pour la morale et aussi un fondement pour la connaisance pratique, indépendamment de laquelle on ne peut asseoir «la science.»[50]

As it would appear from the present discussion, James seems to be in favour of the separation between the scientific and the non-scientific or speculative approaches to the question of free will. Since he seems to think that there is no decisive evidence that would support one over the other, one is free to believe the doctrine that one chooses. If one believes that the PCE is strictly applicable to the universe, then one is entitled to a mechanistic view of the universe, which one might accept despite the fact that the consequences of holding it are morally unsatisfactory. But if one believes in freedom because it is morally satisfactory to do so, then one could still adhere to the PCE but not as a law that is strictly applicable universally, but only as a law which is a mathematical form that summarises and classify laws established by experiment. The PCE is equivalent to a system of differential equations which rules the changes of the bodies subject to them. If the state and motion of these bodies are given at a certain moment, then their state and motion would then be determined for the whole course of time; and thus no free movement can be produced among these bodies, since a free movement would be essentially a movement not determined by previous states and motions. Thus we start from the beginning by assuming that these phenomena are subject to strict determinism. A phenomenon whose peculiarities did not in the least result from the initial data would rebel at any representation by such a system of equations. It was therefore certain in advance that no place is reserved for free actions in the classification arranged. When it was noted

[50]Renouvier, *Essai* II, 419.

afterwards that a free action couldn't be included in the classification, it would be absurd to have concluded that freedom was impossible. So if the evidence for freedom is lacking, what is legitimate is not to deny that freedom exists, but to consider the consequences that would follow from holding it to exist. This would in one sense constitute the evidence for believing in freedom.

4. ON THE STATUS OF THEORETICAL ENTITIES

When scientists talk about theoretical terms, James tells us, they talk

> *as if* reality was made of ether, atoms or electrons, but we mustn't think so literally. The term 'energy' doesn't even pretend to stand for anything 'objective.' It is only a way of measuring the surface of phenomena so as to string their changes on a simple formula. . . .We must find a theory that will *work;* and that means something extremely difficult; for our theory must mediate between all previous truths and certain new experiences.[51]

If a theoretical term like energy, for example, does not refer to anything objective, then the question is: What status do theoretical terms have? For James, theoretical entities do not possess an independent existence, i.e., they are not ontologically independent from empirical experience. So he allows that the scientist postulates the world as composed of atoms, but would insist that the scientist sees that theoretical terms as such are merely instruments, in the case of energy, to measure "the surface so as to string their changes on a simple formula." But at the same time, they are irreducible to sensory experience.

Describing the developments of the late nineteenth-century physics, James clearly emphasises this point in *Some Problems of Philosophy.* He writes:

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[51]James, PRAG, 103-04.

> [T]he concepts current in physical science have also developed mutual oppugnancies which . . . are beginning to make physicists doubt whether such notions develop unconditional 'truth.' Many physicists now think that the concepts of 'matter,' 'mass,' 'atom,' 'ether,' 'inertia,' 'force,' etc. are not so much duplicates of hidden realities in nature as mental instruments to handle nature by after-substitution of their scheme.[52]

Here one recalls what Poincaré[53] had stressed that a concept such as 'mass' is no more than a 'device of the understanding'.

> *Masses are co-efficients which it is found convenient to introduce into calculations.*
>
> We could reconstruct our mechanics by giving to our masses different values. The new mechanics would be in contradiction neither with experiment nor with the general principles of dynamics . . . But the equations of this mechanics *would not be so simple.*[54]

The scientist who applies theoretical terms in formulating his theories does not assume that they exist but only adopts a language which allows him to connect various laws which would otherwise appear unrelated without theoretical terms. So James refrains from bestowing on theoretical terms, which are subjective innovations, any objective existence. In this respect, James seems to be in agreement with Comte who was particularly uneasy about allowing scientists to make hypotheses about unobservable entities for the danger lay in the fact that the success of these theories may encourage scientists to consider these entities as having physical reality.

Thus James assigns to sensory experience a major role in understanding empirical phenomena while envisaging theoretical entities as ontologically dependent on observational terms or empirical experience without being reduced to them. Here the

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[52]James, SPP, n90.
[53]James was familiar with Poincaré's works: *Science et méthode* (1908); *Science et l'hypothèse* (1902); *La Valeur de la science* (1905). According to Perry these works by Poincaré were among those sold from James's library. See *Notes* in PRAG, 161-62. The last book has the entry "pragmatism 44, 53, 57-58, 90, 125" on the flyleaf.
[54]Poincaré, *Science and Hypothesis,* 103-04.

act of postulation plays a pivotal role in this pragmatic view of theoretical terms. These terms are postulated as a matter of procedure and justified by the way in which they work.

The fact that they work in a certain interpretation of a certain physical phenomena secures grounds for asserting them. James calls theoretical terms 'ejects.'[55] Those ejects are like "the contents of our neighbors' minds."[56] They are the sorts of things that we "can never get face to face".[57] James seems to distinguish between 'ejects' and 'imperceptibles' or 'unobservables'. He refers to atoms and ether-waves or dissociated 'ions' as imperceptibles. Ejects are then those things that are not liable to immediate confrontation with facts. The fact that such theoretical entities exist constitutes one of James's main objections to the correspondence theory of truth, which will be dealt with later.

James talks about 'ejects' in *The Meaning of Truth.* For James, experience is ontologically prior to the self-transcendency of our ideas and their truth. Knowledge consists of external relations which are real and have mostly a virtual rather than an actual existence. But

> [w]hat would the self-transcendency affirmed to exist in advance of all experiential mediation or termination, be *known-as?* What would it practically result in for *us,* were it true?
>
> It could only result in our orientation, in the turning of our expectations and practical tendencies into the right path; and the right path here, so long as we and the object are not yet face to face (or can never get face to face, as in the case of ejects), would be the path that led us into the object's nearest neighborhood. Where direct acquaintance is lacking, 'knowledge-about' is the next best thing, and an acquaintance with what actually lies about the object, and is most closely related to it, puts such knowledge within our grasp. Ether-waves and your anger, for example, are things in which my thoughts will never *perceptually* terminate, but my

[55]According to Bird, James got the term 'eject' from W. K. Clifford. See Bird, *William James,* 199.
[56]James, ERE, 34.
[57]James, ERE, 36.

> concepts of them lead me to their very brink, to the chromatic fringes and to the hurtful words and deeds which are their really next effects.[58]

In *SPP*, the following passage is so important that it must be examined closely. Discussing concepts and percepts in physics, James writes:

> The 'rationalization' of any mass of perceptual fact consists in assimilating its concrete terms, one by one, to so many terms of the conceptual series, and then assuming that the relations intuitively found among the latter are what connect the former too. Thus we rationalize gas-pressure by identifying it with the blows of hypothetic molecules; then we see that the more closely the molecules are crowded the more frequent the blows upon the containing walls will become; then we discern the exact proportionality of the crowding with the number of blows; so that finally Mariotte's empirical law[59] gets rationally explained. All our transformations of the sense-order into a more rational equivalent are similar to this one. We interrogate the beautiful apparition, as Emerson calls it, which our senses ceaselessly raise upon our path, and the items there refer us to their interpretants in the shape of ideal constructions in some static arrangement which our mind has already made out of its concepts alone. The interpretants are then substituted for the sensations, which thus get rationally conceived. To 'explain' means to coordinate, one to one, the *thises* of the perceptual flow with the *whats* of the ideal manifold, whichever it be. . . . The conceptual order into which we translate our experience seems not only a means of practical adaptation, but the revelation of a deeper level of reality in things. Being more constant, it is *truer,* less illusory than the perceptual order, and ought to command our attention more.[60]

The observation of certain physical phenomena, like that of the gas molecules, goes with an interpretation of these phenomena. An experiment in physics does consist of both elements. The interpretation that the scientist provides of the phenomenon under investigation substitutes for the relevant concrete data that were collected, the abstract and symbolic representations, the 'ideal constructions' which are the products of the mind alone. The abstract representations correspond to the concrete data on account of the theories already accepted by the physicist. The observational

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[58]James, MT, 68-69.
[59]According to Mariotte's law, at a constant temperature, the volumes occupied by a constant mass of gas are in inverse ratio to the pressures they support. This is also called Boyle's law. See Duhem, *Aim,* 166.
[60]James, SPP, 70-71.

data are rationalised by the formulation of a physical law, such as Mariotte's law, which summarises the great number of experiments, past, present and future, that are carried out.

Although James talks about the correspondence between concrete perceptual data and the abstract conceptual formulations of them, and the translation of the former to the latter, in the process of law formation, this does not imply that his intention is to regard perceptual data as equivalent to abstract formulae. For as he already said, the conceptual or the abstract is a higher and deeper level than the concrete. The implications of what James is claiming now require examination.

The abstract being, as James has described, a more sophisticated kind of entity compared to the perceptual suggests that the correspondence which he claims between the conceptual formulation or abstract formula and the concrete fact does not imply an equivalence between the two. The lack of equivalence suggests either that the abstract formula does not furnish a satisfactory representation of the concrete fact, or that the concrete fact cannot be the precise realisation of the abstract formula. From this lack of satisfactoriness between the exact abstract formulae and the corresponding concrete or perceptual facts, it may be argued with some justification that the concrete facts may correspond to many incompatible theoretical formulae.

James also sees the way we rationalise sense experiences in general to be basically the same as the way we rationalise experiments in physics, i.e., by producing physical laws. James is assuming that in the same way that the laws of physics are essentially grounded on the outcome of experiments, laws of common sense are grounded on the observation of facts.

James cites the example of Mariotte's law in the above quotation without any further explanation of this generalisation. According to this law, volume, temperature and mass are concepts[61] which are both abstract and representations of the results of experiments which acquire their meanings from the physical theories accepted by physicists. The way these representations correspond to the things they symbolise is far too complex in the way of formulation than the way in which abstract concepts refer to perceptual data, where concepts rise from reality more immediately and naturally.

5. MULTIPLICITY OF SCIENTIFIC FORMULAE AND CRITERIA OF CHOICE

James said earlier that our dealings with physical phenomena might produce a number of several formulae all of which explain phenomena equally and also are consistent with facts.[62] If the choice should be made between a number of like competing formulae, on what grounds can it be made? In MT, James gives the following in answer.

> The suspicion is in the air nowadays that the superiority of one of our formulas to another may not consist so much in its literal 'objectivity,' as in subjective qualities like its usefulness, its 'elegance' or its congruity with our residual beliefs.[63]

Also in WB, James makes a similar point. He says that

> of two conceptions equally fit to satisfy the logical demand, that one which awakens the active impulses, or satisfies other æsthetic demands better than

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[61]In SPP, for James 'concept', 'thought' and 'idea' are synonymous.
[62]James, WB, 66.
[63]James, MT, 41.

> the other, will be accounted the more rational conception, and will deservedly prevail.[64]

The application of a description does not preclude the 'simultaneous' application of another entirely different description to the same empirical phenomena. The procedure of selecting between competing descriptions, where the method of reduction is not applicable, is based on subjective criteria such as those of simplicity and elegance.[65]

Again the emphasis is shown in the following:

> Truth in science is what gives us the maximum possible sum of satisfactions, taste included, but consistency both with previous truth and with novel fact is always the most imperious claimant.[66]

James here is offering a definition of truth in science which *sums up* his views about it. His definition here is circular, but this is not the main issue at present. It is important to be cautious as to how to interpret what James is saying. Several points can be made here in this respect.

(1) Since literal objectivity is no longer the sole criterion for the choice between rival theories, it becomes necessary to resort to other criteria that would assist us in selecting between them.

(2) The choice between two or more scientific formulae is made on the basis of subjective qualities only after it has been established in experience that these formulae are equally empirically well-evidenced. Hence, the empirical verifiability of scientific formulae is the primary condition of their truth. Subjective qualities constitute simply the secondary condition of their truth which is only sufficient but

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[64]James, WB, 66.
[65]James, PRAG, 104.
[66]James, PRAG, 104.

not necessary. They do not constitute an alternative to the fundamental condition of verifiability. Thus, it can be said that satisfaction is contingent on verifiability.

(3) The consistency of a scientific verifiable hypothesis with previous acquired truths and with new facts is one type of satisfaction to which James gives great emphasis. It is considered the most important in comparison with other varieties of satisfaction such as usefulness, elegance, taste, and simplicity and other possibilities.[67] These might include, for example, the satisfaction felt by the investigator when the hypothesis he embarked on testing get verified. Furthermore, during the actual process of verification, there are also the feelings of anticipation that the required sought-after result will actually be achieved.

(4) James is not saying that a scientific theory is true iff holding it gives one the most satisfaction possible, in the ordinary sense of the term.

Duhem shares with James his emphasis on the appeal to subjective criteria when selecting among rival scientific formulae or theories. He argues that we are often likely to have many conflicting theories that are consistent with our observations, whatever those may be. However,

> [i]f two different theories represent the same facts with the same degree of approximation, physical method considers them as having absolutely the same validity; it does not have the right to dictate our choice between these two equivalent theories and is bound to leave us free. No doubt the physicist will choose between these logically equivalent theories, but the motives which will dictate his choice will be considerations of elegance, simplicity,

[67]The criteria of simplicity, taste and elegance and consistency apply to both scientific and metaphysical theories. In a letter to R. B. Perry, dated August 4, 1907, James writes: "My position is that, *other things equal,* emotional satisfactions count for truth—among the other things being the intellectual satisfactions. Certainly a doctrine that encouraged immortality would draw belief more than one that didn't, if it were *exactly as satisfactory* in residual respects. Of course it couldn't prevail against knock-down evidence to the contrary; but where there is no such evidence, it will incline belief." Perry, II, 475. James makes the same point again in the following quotation. "When *I say* that, *other things being equal,* the view of things that seems more satisfactory morally will legitimately be treated by men as truer than the view that seems less so, *they quote me as saying* that anything morally satisfactory can be treated as true, no matter how unsatisfactory it may be from the point of view of its consistency with what we already know or believe to be true about physical or natural facts. Which is rot!!" Perry, II, 468.

> and convenience, and grounds of suitability which are essentially subjective, contingent, and variable with time, with schools, and with persons; as serious as these motives may be in certain cases, they will never be of a nature that necessitates adhering to one of the two theories and rejecting the other, for only the discovery of a fact that would be represented by one of the theories, and not by the other, would result in a forced option.[68]

This passage exemplifies clearly the dilemma inherent in being faced with conflicting and apparently equally well-evidenced theories.

6. THREE VIEWPOINTS OF APPROACHING REALITY

James argues that reality can be interpreted from at least one point of view. In *Pragmatism,* he distinguishes between three different ways of approaching it.

> There are . . . at least three well-characterized levels, stages or types of thought about the world we live in, and the notions of one stage have one kind of merit, those of another stage another kind. It is impossible, however, to say that any stage as yet in sight is absolutely more *true* than any other.[69]

The viewpoints from which the reality of physical objects in the world can be approached are the common sense, the scientific and the philosophical. On this particular issue, James writes:

> There is no *ringing* conclusion possible when we compare these types of thinking, with a view to telling which is the more absolutely true. Their naturalness, their intellectual economy, their fruitfulness for practice, all start up as distinct tests of their veracity. . . . Common sense is *better* for one sphere of life, science for another, philosophic criticism for a third; but whether either be *truer* absolutely, Heaven knows. Just now . . . we are witnessing a curious reversion to the common-sense way of looking at physical nature, in the philosophy of science favored by such men as Mach, Ostwald and Duhem. According to these teachers no hypothesis is truer than any other in the sense of being a more literal copy of reality. They are all but ways of talking on our part, to be compared solely from the point of view of

[68]Duhem, *Aim,* 288.
[69]James, PRAG, 92.

> their *use*. The only literally true thing is *reality;* and the only reality we know is, for these logicians, sensible reality, the flux of our sensations and emotions as they pass. 'Energy' is the collective name (according to Ostwald) for the sensations just as they present themselves (the movement, heat, magnetic pull, or light, or whatever it may be) when they are measured in certain ways. So measuring them, we are enabled to describe the correlated changes which they show us, in formulas matchless for their simplicity and fruitfulness for human use. They are sovereign triumphs of economy in thought.
>
> No one can fail to admire the 'energetic' philosophy. But the hypersensible entities, the corpuscles and vibrations, hold their own with most physicists and chemists, in spite of its appeal. It seems too economical to be all-sufficient. Profusion, not economy, may after all be reality's key-note.[70]

There are several essential points to be stressed here. To begin with, we are presented with one of James's various, and indeed inconsistent, treatments of the nature of reality. Here, James is reporting the tendency in the philosophy of science, of positivistic persuasion, which was flourishing then, which is based on a certain interpretation of physical theories. The scientists to whom James was referring were essentially positivists with an energetistic or phenomenological bearings.

To refer again to the views of Duhem, it was noted that he regarded physical theory not as an explanation but as a method of classification of physical phenomena. It consists, he tells us, of a system of mathematical propositions whose function is to represent in a most possible, simple and economical way experimental laws.[71] In this sense, a physical theory does not reveal to us the inner depths of reality but is confined to being merely a convenient and logical classification of observable phenomena. Mach also conceived of a physical theory as an economy of thought and so, experimental laws are held to be reduced to theories. The goal of science thus becomes, for Mach, intellectual economy.[72]

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[70]James, PRAG, 93.
[71]Duhem, *Aim,* 19.
[72]Duhem, *Aim,* 21.

It must be said that Duhem's view of the nature of physical theory seems to suggest, as it actually did to some scientists and philosophers that reality is ultimately phenomenal. But, he was careful to point out, nonetheless, that physical theories, without any claim to reveal any information about a deeper kind of reality, do in fact through the logical order in which experimental laws are arranged, reflect an ontological order.[73]

James also expresses his discontent with a view that takes sensible reality as the only reality that we know. Such a scientific point of view, he argues, though it has its merits, is inadequate; sense reality is just too narrow to encompass other realities which he considers as existing. In MT, while defending himself against the charge of subjectivism, James gives the following distinctions between different kinds of ontologies.

> Cognitively we . . . live under a sort of rule of three: as our private concepts represent the sense-objects to which they lead us, these being public realities independent of the individual, so these sense-realities may, in turn, represent realities of a hypersensible order, electrons, mind-stuff, God, or what not, existing independently of all human thinkers. The notion of such final realities, knowledge of which would be absolute truth, is an outgrowth of our cognitive experience. . . . They form an inevitable regulative postulate in everyone's thinking. Our notion of them is the most abundantly suggested and satisfied of all our beliefs, the last to suffer doubt.[74]

James tells us that hypersensible realities, which include theoretical terms such as electron, are the kind of realities that exist independently of all human knowledge. How, then, can we know realities characterised as such? We can never attain a sure knowledge of them. This does not mean, however, that we can never have any knowledge of them of any kind whatsoever. When we think of them, we think of less equal mental replacements that are characterised by not existing independently of all

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[73]Duhem, *Aim,* x.
[74]James, MT, 130-31.

human thinkers. The reason why we postulate these hypersensible realities is that they help us to organise our thinking and ordering our experiences.

According to this view of the role of hypersensible realities, the purpose of science is not the establishment of structures of the external world by scientists. Rather, its aim is to order our experiences. What makes one theory better than another is not how much it depicts the exact structure of the world, but how good it proves at expanding the limits of our experiences and bringing them to order. If the aim of science is to formulate abstract structures of the world, then it is likely that no immediate correspondence can be found between those mental structures and the world itself. James is offering an interpretation of the relation of 'agreement' between ideas and reality that goes beyond the simple correspondence between these two.

The first class of entities, to which James refers in the previous quotation, are the private concepts which represent the 'sense objects' and as such are subjective experiences. 'Sense objects' which belong to the second class are characterised as public realities which are independent of the individual and are representative of the hypersensible realities. These sense objects are both subjective and objective realities. They are subjective because they are sense realities and so belong to the domain of experience. They are also objective realities because they exist, as James says, independently of the individual. Hence, in that respect they are public. Here James is offering a distinctive characterisation of experience as not being only subjective but also objective.

> Suppose I say to you "The thing exists"—is that true or not? How can you tell? Not till my statement has developed its meaning farther is it determined as being true, false, or irrelevant to reality altogether. But if now you ask "what thing?" and I reply "a desk"; if you ask "where?" and I point to a place; if you ask "does it exist materially, or only in imagination?" and I say "materially"; if moreover I say "I mean that desk," and then grasp and shake a desk which you see just as I have described it, you are willing to call my

> statement true. But you and I are commutable here; we can exchange places; and as you go bail for my desk, so I can go bail for yours.[75]

Here James seems to be attempting to bridge the gap between subjective realities and objective realities; between the knower, the subjective individual, and the external world of physical objects. But his outright renunciation of the existing of this metaphysical and epistemological gap is put forward in his ERE, where he examines the reality that underlies the common-sense objects of the external world and concludes that experience is the sole and ultimate reality. Thus there is no need to appeal either to the Absolute, as did Royce, as the sole possible bridge between the subjective knower and the known object, or to scepticism acknowledging the impossibility of the existing of an appropriate epistemological relationship between subject and object, for there is simply no gap to be bridged.

As already noted, James had approached the problem of reality from two different perspectives. At one stage, the problem of reality was for him the problem of the reality of physical objects. In this respect, he distinguished between three viewpoints from which this question can be approached. At another stage, he answers this problem from a metaphysical viewpoint by inquiring into the fundamental reality that underlies the objects of common sense. In the present discussion, the main concern was the first stage and there is, therefore, no expansion of the second.

[75]James, MT, 117.

7. THE NEW TREND OF SCIENTIFIC LOGIC AND A VERSION OF HOLISM

In *Pragmatism,* lecture II: What Pragmatism means, James argues that on his pragmatic outlook, theories do not provide definite answers to the riddles of the universe. Theories are merely instruments which we hold to enable us to deal effectively with reality. Pragmatism calls for a change of direction away from first things and principles to last things, consequences and facts.[76] This is what the pragmatic method means for James, but pragmatism is also, as he continues to say, a certain theory of truth. He then refers favourably to the new trend of scientific logic which has been developed by Duhem, Poincaré, Mach and others. John Dewey and F. C. S. Schiller, James tells us, were

> [r]iding . . . on the front of this wave of scientific logic . . . with their pragmatistic account of what truth everywhere signifies. Everywhere, these teachers say, 'truth' in our ideas and beliefs means the same thing that it means in science. It means . . . *that ideas (which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relation with other parts of our experience* . . . Any idea upon which we can ride, so to speak; any idea that will carry us prosperously from any one part of our experience, to any other part, linking things satisfactorily, working securely, simplifying, saving labor; is true for just so much, true in so far forth, true *instrumentally.*[77]

What is this new procedure which James reports enthusiastically? James tells us that the procedure by which Dewey and Schiller arrive at their conception of truth is the same as that which is followed by geologists, biologists and philologists and offers proven success. It consists of taking "some simple process actually observable in operation - as denudation by weather, say, or variation from parental type, or change of dialect by incorporation of new words and pronunciations-and then generalize

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[76]James, PRAG, 32.
[77]James, PRAG, 34.

it."[78] How any individual settles on new opinions, is one good example of Dewey's and Schiller's application of this procedure, which James chooses to examine. According to this view, ascribed to both philosophers by James, the individual encounters a new experience which puts strains on the 'stock of old opinions' already held.[79] This causes an 'inward trouble' for the individual investigator which he tries to avoid by 'modifying his previous mass of opinions.' However, this modification must be carried out with the 'minimum disturbance' of the old stock of beliefs, and most of it is retained, "for in this matter of belief", James says, "we are all extreme conservatives."[80] Consequently, the investigator attempts first at changing

> this opinion, and then that (for they resist change very variously), until at last some new idea comes up which he can graft upon the ancient stock with a minimum of disturbance of the latter, some idea that mediates between the stock and the new experience and runs them into one another most felicitously and expediently.
>
> This new idea is then adopted as the true one. It preserves the older stock of truths with a minimum of modification, stretching them just enough to make them admit the novelty, but conceiving that in ways as familiar as the case leaves possible.[81]

The reference in the above quotation to the new trend of thinking, championed by Duhem and other scientists, seems to indicate that for James, beliefs in general are not tested individually but holistically. Both Duhem and James are presenting versions of holism. But while Duhem's holism is restricted to descriptive sciences such as physics, James's own version of holism applies to both cognitive and non-cognitive systems of beliefs. In this respect, James had gone beyond Duhem. Duhem's description of what is involved in the process by which the physicist tests a particular proposition, seems not very different from the process followed by the

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[78]James, PRAG, 34.
[79]James, PRAG, 34.
[80]James, PRAG, 35.
[81]James, PRAG, 35.

investigator in acquiring new beliefs, as viewed by James. For Duhem and James, propositions scientific or, in the case of James, these and others, are tested in conjunction with the old stock of beliefs and both emphasise the investigator's concern to save as much of the old stock of beliefs as possible. James adheres to his originally accepted beliefs as the ones that he considers to be accurate. If confronted with a belief or a new experience[82] that contradicts them, then this new belief should either be abandoned or the old beliefs modified. James also held that the new idea had to make the least possible modification to the previously held beliefs. This implies that in the course of testing a new belief, James considers that those old beliefs are accurate and thus should be preserved in the face of a new belief.

Duhem argued for the denial of the existence of crucial experiments in science. A theory can never be absolutely refuted by any experimental observation, for many subsidiary empirical presuppositions are made when a scientific theory is subjected to observational examination. In this process of testing, what appear to be negative observations could be regarded as evidence of the falsity of one or another of those subsidiary presuppositions rather than of the theory itself.[83] It follows that experimental observation can never put a theory to total refutation.[84]

It is now appropriate to mention one of Duhem's theses which is relevant to the criterion of consistency of theory choice which we have mentioned earlier. In science, according to Duhem, when a physicist wishes to examine a proposition, he does not test it individually but he also put to test the whole set of theories that he accepts.

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[82]It might be worthwhile to point out that James's use of experience, as in the previous quotation, is not limited to sense experience. A new experience might mean: "Somebody contradicts them; or in a reflective moment he discovers that they contradict each other; or he hears of facts with which they are incompatible; or desires arise in him which they cease to satisfy." James, PRAG, 34-35.
[83]This view is succinctly put by Quine when he says that our theories "face the tribunal of sense experience not individually but only as a corporate body." Quine, *From a Logical Point of View,* 41.
[84]Duhem, *Aim,* 185.

> The prediction of the phenomenon . . . does not derive from the proposition challenged if taken by itself, but from the proposition at issue joined to that whole group of theories; if the predicted phenomenon is not produced, not only is the proposition questioned at fault, but so is the whole theoretical scaffolding used by the physicist. The only thing the experiment teaches us is that among the propositions used to predict the phenomenon and to establish whether it would be produced, there is at least one error; but where this error lies is just what it does not tell us. The physicist may declare that this error is contained in exactly the proposition he wishes to refute, but is he sure it is not in another proposition? If he is, he accepts implicitly the accuracy of all the other propositions he has used, and the validity of his conclusion is as great as the validity of his confidence.[85]
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> In sum, the physicist can never subject an isolated hypothesis to experimental test, but only a whole group of hypotheses; when the experiment is in disagreement with his predictions, what he learns is that at least one of the hypotheses constituting this group is unacceptable and ought to be modified; but the experiment does not designate which one should be changed. . . . People generally think that each one of the hypotheses employed in physics can be taken in isolation, checked by experiment, and then, when many varied tests have established its validity, given a definitive place in the system of physics. In reality, this is not the case. Physics is not a machine which lets itself be taken apart; we cannot try each piece in isolation and, in order to adjust it, wait until its solidity has been carefully checked. Physical science is a system that must be taken as a whole; it is an organism in which one part cannot be made to function except when the parts that are most remote from it are called into play, some more so than others, but all to some degree.[86]

8. METAPHYSICS, PHYSICS AND PSYCHOLOGY

Duhem argued strongly for the complete separation of physics from metaphysics. A close study of the history of scientific theories convinced him that they are not the means to capture the inner depths of reality. Scientists employ physical theories merely in classifying physical phenomena in order to help in comprehending them. If one wants to dig deeper into reality, then, Duhem says, physical theories are not the means to that end.

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[85]Duhem, *Aim,* 185.
[86]Duhem, *Aim,* 187-88.

Duhem's total and strong separation of physics from metaphysics is not motivated by a rejection of metaphysics. On the contrary, his aim in arguing for their separation was to suggest for metaphysics a different basis other than physics, allowing thereby room for metaphysical and religious beliefs. Hence, Duhem argued that physical theories do not furnish an explanation of reality itself. He writes that

> to explain (explicate, *explicare*) is to strip reality of the appearances covering it like a veil, in order to see the bare reality itself.[87]

To consider physical theory as an explanation is to regard its purpose as the going beyond the appearances and arriving at a full grasp of the physical reality underlying them. That requires an acknowledgement of a reality distinct from the appearances which are all that we encounter in observing. Thus we are confronted with the questions of whether there exists a reality which transcends appearances and of the nature of this reality, if it really exists. For Duhem, physics, as an experimental science, cannot provide answers to both questions. This job is left to metaphysics to deal with. Thus, he says that

> *if the aim of physical theories is to explain experimental laws, theoretical physics is not an autonomous science; it is subordinate to metaphysics.*[88]

The danger of this conclusion lies in the fact that the different and rival schools of metaphysics, with physicists among their followers, each school with its own methods, principles and conclusions, may extend their divisions into the domain of physics. Duhem expresses this point in the following.

> In order for the philosophers belonging to a certain school to declare themselves completely satisfied with a theory constructed by the physicists of the same school, all the principles used in this theory would have to be deduced from the metaphysics professed by that school. If an appeal is

[87]Duhem, *Aim,* 7.
[88]Duhem, *Aim,* 10.

> made, in the course of the explanation of a physical phenomenon, to some law which that metaphysics is powerless to justify, then no explanation will be forthcoming and physical theory will have failed in its aim.[89]

Furthermore, physical theories do not derive completely from any metaphysical doctrine. For "no metaphysics gives instruction exact enough or detailed enough to make it possible to derive all the elements of a physical theory from it."[90] It is thus the case that in a physical theory, "there are always posited certain hypotheses which do *not* have as their grounds the principles of the metaphysical doctrine."[91] This resulting confusion can only be avoided, in Duhem's view, by calling for the independence of physics from metaphysics. This can be legitimately achieved, Duhem argued, by holding a view of physical theory along the following lines.

> A physical theory is not an explanation. It is a system of mathematical propositions, deduced from a small number of principles, which aim to represent as simply, as completely, and as exactly as possible a set of experimental laws.[92]

Thus, mathematical laws are in themselves economical statements of experience. However, they convincingly offer a suggestion of some transcendent order, that must echo some harmony subsisting out there in reality. This harmony is not truly represented by either mechanical models or pictorial images or any other form of hypothesis. Our access to this harmony is possible through discerning natural classifications among the laws of nature. By 'natural' Duhem means that which reflects the relations of things in the natural order, though not their actual structure. Proper classification guarantees the capacity of theory to guide experiment in the prediction of phenomena not yet observed and in the formulation of laws not yet expressed.

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[89]Duhem, *Aim,* 16.
[90]Duhem, *Aim,* 16.
[91]Duhem, *Aim,* 18.
[92]Duhem, *Aim,* 19.

This positivistic thesis of the separation of the natural sciences from metaphysics, which originates with Comte, had also a deep influence on James. Its effects are well manifested in his dealings with the relations between metaphysics and psychology in his classic work *The Principles of Psychology.* In PP, he offered a new starting-point for psychology. In the preface to PP, published in 1890, he declares that psychology could only become a science if it were treated positivistically and thus separated from metaphysics. He tells us that this 'strictly positivistic point of view' is the only feature of his book for which he feels 'tempted to claim originality.'[93] In the preface to the Italian translation of the PP,[94] he again stresses the importance of treating psychology as a positive science; setting forth exactly what he means by the claim that psychology must be established in a similar manner to the other natural sciences. Thus, he writes:

> I thought that by frankly putting psychology in the position of a natural science, eliminating certain metaphysical questions from its scope altogether, and confining myself to what could be immediately verified by everyone's own consciousness, a a [sic] central mass of experience could be described, which everyone might accept as certain, no matter what the differing ulterior philosophic interpretations of it might be. I therefore assumed uncritically an external world, I assumed the existence of states of consciousness, and I assumed that the states of consciousness might "know" both the external world and each other.[95]

Every science, then, assumes uncritically certain data; avoiding questioning their origins and the problems that might continually surface about them. Hence, natural sciences assume an external physical world that exists independently of

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[93]James, PP, I, 6. It can be argued that James's claim for the originality of his project of establishing psychology as a positivist science might be based on the fact that Comte did not include psychology in his classification of the natural sciences. He held that it is not easy to ascertain laws between mental phenomena, in the way that this can be done in physics, for example.

[94]This preface to Ferrari's Italian translation of *The Principles of Psychology* was written ten years after it was first published. It was mailed to Ferrari on October 28, 1900. See PP, III, Appendix III, 1482-84.

[95]James, PP, III, 1483.

consciousness. If psychology is to follow the example of the natural sciences, then it must avoid metaphysical hypotheses and content itself with assuming uncritically

> (1) *thoughts and feelings,* and (2) *a physical world* in time and space with which they coexist and which (3) *they know.*[96]

Thus, psychologists leave to the metaphysicians questions such as whether there is a deeper unity between subject and object, the real or deep nature of minds and whether 'thoughts' can possibly know objects in general.[97] Treating psychology as a positive science, however, imposes some restrictions on what psychology can actually achieve. James is careful to indicate the nature of these limitations. We must, he says,

> *ask ourselves whether, after all, the ascertainment of a blank unmediated correspondence, term for term, of the succession of states of consciousness with the succession of total brain-processes, be not the simplest psycho-physic formula, and the last word of a psychology which contents itself with verifiable laws, and seeks only to be clear, and to avoid unsafe hypotheses.*[98]

Psychology, then, as a positive science is concerned only with the ascertainment of lawful empirical correlations between brain states and mental states. It does not attempt to plunge into regions which are "inaccessible to experience and verification."[99]

James's remarks on the extent to which his project might succeed are barely consistent. In 1890, for instance, he expresses his dissatisfaction with the results of his research by describing it as "testifying to nothing but two facts: *1st,* that there is

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[96]James, PP, I, 6.
[97]James, "A Plea for Psychology as a 'Natural Science'" in EP, 271.
[98]James, PP, I, 182.
[99]James, PP (1981), I, 180.

no such thing as a *science* of psychology, and *2nd,* that W. J. is an incapable."[100] In 1892, he shows strong support for his project of PP by remarking that "I wished, by treating Psychology *like* a natural science, to help her to become one."[101] Later in 1895, he suggests that the project of establishing psychology as a positivist science seems to be impossible. He writes:

> I have become convinced since publishing that book that no conventional restrictions *can* keep metaphysical and so-called epistemological inquiries out of the psychology-books.[102]

In light of the various comments that James made in support of his programme of PP, one can with some justification give little attention to the negative ones. However, this requires an investigation of the reasons that might underlie his questioning the very possibility of his project. Several points can be made in this context.

(1) The separation of psychology from metaphysics, in James's view, is only provisional. In the conclusion of PBC, James says we must understand

> how great is the darkness in which we grope, and never to forget that the natural-science assumptions with which we started are provisional and revisable things.[103]

However, this separation seems at this stage of the development of psychology, in James's view, most appropriate for the following reasons. To hold that the assumptions of psychology are problematic while deciding to treat them as unproblematic would allow the psychologist to focus on the examination of psychological phenomena with the hope of arriving at results that could be subjected to empirical verification. This does not suggest, however, that James is denying the

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[100]Letter to Henry Holt, dated May 9, 1890, LWJ, I, 294.
[101]James, "A Plea for Psychology as a 'Natural Science'" in EP, 270.
[102]James, EPH, 88.
[103]James, PBC, 401.

significance of the metaphysical problems concerning these phenomena or the capability of metaphysics to deal with them ultimately. Once psychology as a science is formed, it will then "fall a prey to philosophical reflection."[104]

(2) James's project of establishing psychology as a natural science is also deeply motivated by his interest in the development of psychical research and his concerns with the treatment of mental illnesses. Thus psychologists could conduct their investigations into such phenomena without worrying about resolving metaphysical problems.

> The 'psychical researchers,' though kept at present somewhat out in the cold, will inevitably conquer the recognition which their labors also deserve, and will make, perhaps, the most important contributions of all to the pile. But, as I just remarked, few of these persons have any aptitude or fondness for general philosophy; they have quite as little as the pure-blooded philosophers have for discovering particular facts.[105]

Later in his life, James became much interested in psychical research. He was very sympathetic towards the *American Society of Psychical Research* which was dedicated to the exploration of the abnormal and 'supernormal' phenomena like clairvoyance and apparitions. In a letter to Carl Stumpf, dated Jan 1886, James acknowledges the fact that there is much room for deception in these investigations but that he believes that

> there is no source of deception in the investigation of nature which can compare with a fixed belief that certain kinds of phenomenon are *impossible*.[106]

In WB, he warns that if such investigations are to be taken seriously by academic scientists, they should produce 'facts', the sort of facts accepted by academic

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[104]James, "A Plea for Psychology as a 'Natural Science'" in EP, 275.
[105]James, "A Plea for Psychology as a 'Natural Science'" in EP, 272-73.
[106]James, LWJ, I, 248.

scientists.[107] James thought that the temperament of investigators, in this case of members of the society, or their theoretical inclination would not make a difference because their task is to

> ascertain in a manner so thorough as to constitute *evidence* that will be accepted by outsiders, just what the *phenomenal conditions of certain* concrete phenomenal occurrences are. Not till that is done, can spiritualistic or anti-spiritualistic theories be even mooted.[108]

As a matter of policy, however, James later pointed out, the choice of the officers in this particular society is confined to scientists. The reason is not that

> scientific men are necessarily better judges of all truth than others, but that their adhesion would popularly seem better *evidence* than the adhesion of others, in the matter. And what we want is not only truth, but evidence.[109]

The talk of 'isms' is irrelevant. "'Facts' are what are wanted."[110] In order that these wild facts which are *so* discontinuous be legitimised, success must be achieved in naturalising them as a branch of 'legitimate science'.[111] In a letter to his sister Alice, dated July 6, 1891, James expresses his disappointment in the inability of science to account for the new findings concerning human psychology. This has made him, he says, "to turn for light in the direction of all sorts of despised spiritualistic and unscientific ideas."[112] However, James took no active role in the work of the society after 1896.[113]

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[107]Here James distinguishes between 'facts', like those accepted by academic scientists, and what he calls 'wild facts'; those with 'no stall or pigeon-hole', like those accepted by the 'feminine-mystical' mind.
[108]James, LWJ, I, 250.
[109]James, LWJ, I, 250.
[110]James, LWJ, I, 250.
[111]James, LWJ, I, 306.
[112]James, LWJ, I, 310.
[113]James, LWJ, II, 286.

(3) In PP, James, the psychologist, defended a 'thoroughgoing dualism' which assumes two elements, thoughts and objects which are irreducible.[114] A thorough overhaul of these assumptions, James tells us, is the task of metaphysics.[115] In his later writings, James, as a metaphysician, held that this dualism couldn't be maintained as ultimate. He argued for the philosophical position known as radical empiricism according to which thoughts and objects are revealed as accidentally co-given in our experience though they are distinguishable. According to radical empiricism,

> *things and thought are not at all fundamentally heterogeneous; they are made of one and the same stuff, which as such cannot be defined but only experienced; and which, if one wishes, one can call the stuff of experience in general.*[116]

James appeals to the stuff of pure experience wherein subject and object are not experientially given as separate entities, but rather as essentially relational. What experience presents in its immediacy is the object and subject in an inseparable bond. The 'subjective' consciousness is always inseparable from the content of experience. James proposes that what we suppose to exist is only the content of consciousness, not consciousness as an entity. Thus radical empiricism denies the straightforward conception of intentionality of consciousness, that it is about something, and endorses "its *aboutness* as a function which it only performs by way of its consequences in further experience."[117]

It is beyond the scope of this discussion to examine closely James's formulation of radical empiricism. It might have some degree of relevance, however, to point out that the focus of some commentators on James's PP, while overlooking his later

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[114]James, PP (1891), I, 218.
[115]James, PP (1891), I, vi.
[116]James, ERE, 271.
[117]Sprigge, *James & Bradley,* 110.

writings, in particular, his ERE, has inspired at least one major interpretation of James according to which James features as proto-transcendental phenomenologist; the pioneering soul of the phenomenologist movement. The examination will not be attempted on the detail of this interpretation of James, but some comments may suffice here.

Bruce Wilshire, for example, in his *William James and Phenomenology,* argues that James discovered the essential phenomenological themes prior to and independently of the work of Husserl. James made the 'phenomenological breakthrough' by his discovery of the law of the intentionality of consciousness, yet he was unaware of its implications. The difficulties that James was confronted with in his programme for a 'natural scientific psychology' arise from his assumption of a dualism of states of consciousness, on one hand, and of brain states, on the other.[118] Thus, when James sought to identify conscious states, he realised that conscious states could not be identified independently of their 'cognitive objects.'[119] To be able to investigate the relationship between conscious states and brain states, Wilshire argues, James must first identify conscious states independently of their cognitive objects.

> James's *de facto* tendency to specify mental states in terms of their cognitive objects has significant repercussions. I believe that this tendency—or latent strand as I call it—can be profitably discussed within the conceptual framework of the phenomenological concept of intentionality. . . . More than this, however, I believe that the latent strand in James's *Principles* can be discussed profitably within the conceptual framework of the phenomenological doctrine of the lived world or *Lebenswelt.*[120]

So, while struggling with this problem, James discovers, Wilshire tells us, the notion of intentionality. Conscious states always deal with 'objects' that transcend

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[118]Wilshire, *William James and Phenomenology,* 11-13.
[119]Wilshire, *William James and Phenomenology,* 17-19.
[120]Wilshire, *William James and Phenomenology,* 18.

themselves; they always intend the objects of which they are conscious. Hence the collapse of James's dualistic programme. According to Wilshire, James was also unable to identify the objects of consciousness without identifying them as part and parcel of the whole 'world of practical realities.'[121] Here James arrived at the phenomenological idea of 'Lebenswelt', as Wilshire puts it, 'the companion notion to intentionality', i.e., the life-world within which he can identify conscious states.

However, a comparison between the specific features of consciousness revealed by James's natural scientific psychology and those revealed by Husserl's phenomenology would guide us in deciding on the soundness or otherwise of Wilshire's views. Taking into account James's intention of establishing psychology as a natural science of 'finite individual minds' and the features of consciousness which he laid down, as a living, striving and selecting agency, something active, changing and adapting, one finds James's views in sharp contrast with the view of consciousness that Husserl seems to be defending.

For Husserl, intentionality is the main theme of phenomenology, the truth of which is an *a priori* truth.[122] This implies that a truth as such is not discovered by empirical inquiry or by a natural scientific study. It is evident that James and Husserl hold contrasting views of consciousness. James's view of human consciousness differs from Husserl's phenomenological view of it. James would regard Husserl's view of consciousness as essentially 'intentional', as psychologically unrealistic. For James, the cognitive function of consciousness has no significance apart from its relation to the knower's purposes and private interests. Hence, James argues that "consciousness is at all times primarily *a selecting agency.*"[123] He writes:

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[121]Wilshire, *William James and Phenomenology,* 19.
[122]Husserl, *Ideas,* para 36.
[123]James, PP (1891), I, 139.

> Every actually existing consciousness seems to itself at any rate to be a *fighter for ends,* of which many, but for its presence, would not be ends at all. Its powers of cognition are mainly subservient to these ends, discerning which facts further them and which do not.[124]

Consciousness, in Husserl's terms, is not to be understood as a fighter for ends, but as intentional. Consciousness understood as such does not create interests or fight for them. Thus the consciousness that Husserl's phenomenology introduces is only the epistemic consciousness, not the finite individual consciousness. Therefore, Wilshire's reading of James is unsound because it distorts James's conclusions about human consciousness related to his natural scientific psychology.

Husserl's later investigations into consciousness also contrast sharply with James's later view of consciousness. Although Husserl appeals to lived-experience, he holds a view of consciousness for which mental acts are inherently intentional. All straightforward experiences have a complex of latent intentionalities, a complex explicated in eidetic and transcendental reflection. What is implied in this revealed intentionality is the pure ego, a notion which has been disputed by James.

It is worth pointing out that the term 'intentionality' never features in James's discussions of consciousness. In PBC, he abandoned this property as one of the essential characters of consciousness. His omission of this property should not be taken as evidence of James's lack of a full grasp of the importance of the distinctions he was making, as some commentators hold. James's omission of this property should be explained as a further step in the direction of radical empiricism whereby consciousness becomes a function of pure experience. Wilshire has ignored the further development in James's thought which sets him far from transcendental phenomenology. As for Wilshire's ascription to James the honour of discovering the

[124]James, PP (1891), I, 141.

law of the intentionality of consciousness, it is worth mentioning that this notion of intentionality known as the fundamental characteristic of consciousness to be a consciousness of something is not a new insight; traces of a theory of intentionality can be found as early as Aristotle and continue up to the modern period. Thus James's application of this property in PP lies wholly within the traditional use, while it was for Husserl to give it a fully explicit elaboration.

Some commentators have pointed out parallels between Husserl's and James's thought, namely, their rejection of rationalistic constructions, their appeal to pure-experience and their questioning the working distinction between mind and world which was dominant in modern thought. However, these views are also shared by other philosophers who are neither phenomenologists nor pragmatists. As for James's later philosophy of radical empiricism, although both he and Husserl started from a common ground, both developed quite different philosophies. James's characterisation of thoughts in relation to objects rules out the possibility of an eidetic or transcendental phenomenology. Thus, James's radical empiricism is in contrast with Husserl's phenomenological project.

In terms of the influence they exerted on one another, there is evidence on Husserl's side, expressed in his references to James and in his admiration of James's philosophical doctrines. He credits James in *Logical Investigations* with teaching him how to overcome psychologism, and in the *Krisis,* with being the first to describe the horizonal structure of experience in the notion of the 'fringes of consciousness.' Husserl refers James as '"a daring and original man," an "excellent investigator," unshackled by any tradition.'[125] On James's side, however, one finds a complete neglect of Husserl, except for James's advice against publishing an English

[125]Edie, 'William James and Phenomenology', 489.

translation of Husserl's book *Logische Untersuchungen.* At the time, James believed that "nobody in America would be interested in a new and strange German work on logic."[126]

9. THE IMPACT OF COMTEAN POSITIVISM

9.1 SOME REMARKS ON JAMES AND POSITIVISM

The question arises as to how far was James committed to positivism.[127] Perry tells us that in the years 1868-1870 James was a provisional adherent of positivism. James accepted Chauncy Wright's positivistic view of science according to which, science is "an inductive discovery of the relations of phenomenal happenings reduced so far as possible to their elements."[128] In Pragmatism, James refers to Wright as a tough-minded man whose "alpha and omega are *facts."* Wright used to say, James recalls, that "Behind the bare phenomenal facts . . . there is *nothing."*[129] In WB, James seems to be in agreement with Wright on the limitations of the positivist view of science. He counts himself among those who believe that

> the physical order of nature, taken simply as science knows it, cannot be held to reveal any one harmonious spiritual intent.[130]

But already before 1875, Perry tells us, James came to think that positivism is 'both narrow and arbitrary.' He explains why James thought so:

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[126]Spiegelberg, *The Context of the Phenomenological Movement,* 107.
[127]According to Gillispie, the term positivism was coined by August Comte in the early nineteenth-century. *The Edge of Objectivity: An Essay in the History of Scientific Ideas,* 496.
[128]Perry, I, 521, cf. C. Wright, *Philosophical Discussions,* 1877, 71, 244-50.
[129]James, PRAG, 126.
[130]James, 'Is life worth Living?' in WB, first published in the *International Journal of Ethics*, October 1895, 52.

> For James positivism was not only unresponsive to men's religious hopes, it was repugnant to common sense and contrary to metaphysics; and in pointing this out he made it quite evident that his sympathies were with "common sense and metaphysics."[131]

Perry maintains that although both James and Wright held similar views on 'actual experience', their main differences arise from "Wright's *profession* of positivism, and . . . from James's avowed *sympathy* with the rationalistic or transcendental school."[132]

Perry's remarks seem to suggest that James's main quarrel with positivism is its rejection of metaphysics. This denial of metaphysics would leave religion dissatisfied because of the absence of moral ideals, the ultimate fulfilment of which is ensured by God. Thus the 'physical order' which science informs us about is only a 'partial order' that needs to be complemented by spiritual order. Here a distinction is made between positivism as a world-view and positivism as a method and view of science. As a world-view, it can be argued, James was unsympathetic to positivism which he regarded as unsatisfactory. But as a method and a view of science, his sympathy, it can be shown, remains with it.

We find that the general attitude among some of James's commentators is to categorise James as anti-positivist, without even trying to examine the main assumptions of positivism. Dissatisfied with positivism as a world-view, James set out to reform positivism so that it would accommodate what he thought positivism, as a world-view, had inadequately left out.

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[131]Perry, I, 524.
[132]Perry, I, 524.

9.2 SOME TENETS OF COMTEAN POSITIVISM

Positivism is a distinct trend in improved methodological thinking which had flourished in the nineteenth-century. It was advocated by the eminent French thinker Auguste Comte (1798-1857) who coined the term 'positivism'. Positivism is concerned with what there is and what is directly experienced. It has liberated itself from metaphysics by confining itself to the study of phenomena. Hence, it was in one way taken to be connected with the phenomenalist theory of knowledge. In more modern terms, it was linked to the logical positivist movement through its verificationist theory of meaning. The great achievement of Comte's philosophy of science was to bring the positive, scientific approach to the study of social phenomena. J. S. Mill tells us that Comte was the first to attempt the scientific extension of the positivist viewpoint to all domains of human knowledge.[133] But what are the main tenets of Comte's positivist philosophy? There are certain fundamental features of it which are directly relevant to this discussion of James's philosophy of science. A summation of the relevant features is offered below.

(1) Hypotheses are essential to scientific inquiry. Knowledge of things can only progress by the framing of hypotheses, by testing them by observation and experiment and by modifying them according to the results. Hence, the starting-point of science is not the collection of facts but the use of hypotheses. Scientific truths are not established by the gathering data, but by hypotheses.

(2) Hypotheses must be verifiable. From among two or more verifiable hypotheses which are equally consistent with the phenomena, we opt for the simplest one. Simplicity is not an alternative to verifiability, which is the most fundamental, but is applied in conjunction with it.[134]

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[133]Mill, *Auguste Comte and Positivism,* 3.
[134]Laudan, *Science and Hypothesis,* 154.

(3) Natural sciences set a methodological standard model against which the degrees of development of all the other sciences may be measured. Any attempt to investigate the world that does not employ the methods of the empirical sciences deemed misguided. Metaphysics is one such example.

(4) The only genuine knowledge that is accessible to us is that of phenomena and their succession expressed in the form of laws. These laws enable us to predict phenomena. The ultimate causes or essences of phenomena are unknown to us and thus excluded from the range of possible hypotheses that are candidates for scientific investigation.

(5) The postulation of theoretical or unobservable entities does not involve any claim of their objective existence.

(6) The role of the Law of the Three Stages in interpreting the history of science. These stages are: the theological, the metaphysical and the positive. The first stage is one in which an attempt is made at explaining facts by reference to the supposition of extra-phenomenal reality. The second stage of explanation is an intermediate or transitional one which does not offer a new principle of explanation of facts, it, rather, fluctuates between the supernatural and the positive. Its explanation of phenomena, however, is still one that has recourse to something that goes beyond phenomena - though it is not given by the appeal to the supernatural, but by the use of certain abstract concepts. The last stage is one where it is only permissible to use concepts that refer to phenomena only. The criterion that determines their acceptance or rejection is that of verifiability, since given concepts at this stage refer only to phenomena.

(7) What we really have as a consequence are two mental attitudes of the human mind. On the one hand, there is the tendency to pursue the causes and essences of phenomena in an attempt to explain them and their laws. In this sense, the mind seeks the knowledge of the absolute. On the other hand, there is the tendency to

focus on the knowledge of the relative through the satisfaction by the examination of the phenomena and their laws. The latter enables us to predict new phenomena.
(8) Comte's classification of the sciences includes six fundamental sciences, mathematics, astronomy, physics, chemistry, biology and sociology. Psychology was not included in this classification because Comte did not regard the method of the observation of psychological phenomena as a scientific method that enables us to discover their laws. Psychological phenomena, according to positivist philosophy, must be studied in the same way as other natural sciences. Positivist philosophy does not concern itself with the causes and essences of psychological phenomena. It deals only with their laws.[135]

It can be argued that James is fundamentally in agreement with Comte on most, if not all, of these doctrines. It is hoped that our discussion of the various aspects of James's view of science does support this claim. James's dissatisfaction with positivism as a world-view, however, did lead him to make further claims in which he appears to depart from Comtean positivism in order to accommodate his sympathy with metaphysics and religion. Firstly, he considers both scientific and metaphysical propositions of predictive power, while for Comte, predictive power functions as a criterion for distinguishing scientific propositions from non-scientific ones. In this sense, he takes metaphysical propositions to be lacking in any predictive power.[136] Secondly, James combines the criterion of predictive power and the anticipated consequences, either empirical or metaphysical, of a proposition as determinants of its meaning. In contrast, Comte stresses the predictive power of propositions (scientific ones only), or simply predictions, because they are

[135]See the following references which discuss the main claims of Comte's philosophy. Mead, *Movements of Thought in the Nineteenth Century;* Appendix: French Philosophy in the Nineteenth Century, 418-510, Lévy-Bruhl, *History of Modern Philosophy in France,* 375-396 and Mill, J. S., *Auguste Comte and Positivism.*
[136]Laudan, *Science and Hypothesis,* 142.

empirically testable or verifiable and, in his view, only verifiable propositions are meaningful.[137]

James thus protests against the positivists' application of predictive power to scientific propositions only, thereby excluding metaphysical ones. As said earlier, for James the predictive power is extended to metaphysical propositions so that a metaphysical proposition like 'God exists' becomes meaningful if it enables the believer to anticipate certain consequences which are different from those consequences anticipated by the non-believer. For James, theism and materialism are, from an empirical point of view equivalent, in the sense that there is no sufficient empirical evidence in favour of one as against the other. However, they differ in the metaphysical consequences that are likely to follow from each. On the theistic hypothesis we may anticipate the fulfilment of our moral demands which are guaranteed by God. On the materialist hypothesis, however, we may not. James describes these meaningful alternatives as follows.

> The world may in fact be likened unto a lock, whose inward nature, moral or unmoral, will never reveal itself to our simply expectant gaze. The positivists, forbidding us to make any assumptions regarding it, condemn us to eternal ignorance, for the "evidence" which they wait for can never come so long as we are passive. But nature has put into our hands two keys, by which we may test the lock. If we try the moral key *and it fits,* it is a moral lock. If we try the unmoral key and *it* fits, it is an unmoral lock. I cannot possibly conceive of any other sort of "evidence" or "proof" than this.[138]

[137]Laudan, *Science and Hypothesis,* 144.
[138]James, WB, 88.

10. CONCLUSION TO PART ONE

The main features of James's view of science are now examined. The most significant of these are listed below.

(1) Hypotheses are necessary for the progress of science and can neither be deduced or induced from matters of fact. Hypotheses must be subjected to the test of verification or refutation by experience.

(2) Rejection of a correspondence view between theories and facts.

(3) Scientific theories are not transcripts of reality. Scientific laws are only approximations.

(4) The existence of a multiplicity of conceptual frameworks that account for the same empirical phenomena, without the need of either their being reduced to a single framework or being ultimately reduced to sensory experience. Accordingly, when James's views about truth in science are investigated, two conditions can be distinguished: (1) the primary condition of verifiability; (2) the secondary condition of satisfaction; where (2) is contingent on (1).

It can be argued that these elements are strongly echoed in James's pragmatic method. In fact, James did think of his pragmatic method as an extension of scientific method. He did regard all philosophical claims as hypotheses to which the pragmatic method could be applied. He tells us that "a normal philosophy, like a science, must live by hypotheses."[139] Just as scientific hypotheses are subjected to verification or falsification by empirical experience, philosophical hypotheses are subjected to acceptance or rejection according to whether they have or lack certain consequences. The application of the pragmatic method assists us in the process of differentiation between alternative philosophical hypotheses according to the

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[139]James, LWJ, II, 184.

consequences, empirical or metaphysical, that they may anticipate. Just as scientific theories are dependent on sensory experience, philosophical hypotheses are dependent on consequences.

Part Two attempts to show how these elements of James's view of science were incorporated in his pragmatic view of truth. The following quotation of James offers a good introduction to it by stating what exactly it is not.

> The trail of the human serpent is thus over everything. Truth independent; truth that we *find* merely; truth no longer malleable to human need; truth incorrigible, in a word; such truth exists indeed superabundantly—or is supposed to exist by rationalistically minded thinkers; but then it means only the dead heart of the living tree, and its being there means only that truth also has its paleontology and its 'prescription,' and may grow stiff with years of veteran service and petrified in men's regard by sheer antiquity.[140]

[140]James, PRAG, 37.

PART TWO: TRUTH

1. INTRODUCTION

In the previous part of the thesis, an outline of James's conception of the nature and scope of scientific method is attempted. The present part shows how his view of scientific method was one of the principal factors in his philosophising on truth. In fact, how he applied his view of scientific method to the problem of truth and the role that his general views on science played in shaping his views on the issue is examined; also this application is assessed.

James's pronouncements on truth engendered a storm of controversy and criticism. His views were at first dismissed in an offhand manner and indeed ridiculed by many philosophers, to whom James's conception of truth amounted to no more than the equating of truth and both expediency and workability. Many of those critics found it quite evident that there exists an important difference between the truthfulness of ideas and their utility or workability.

Such characterisation of James's theory of truth is indeed a narrow one, let alone an unfair summary of a complex and subtle theory. It is far more subtle than it is generally thought to be and deserves to be taken much more seriously than most philosophers are inclined to take it. It is fair to say, however, that James was partly responsible for the misreading of his views. The form in which he presented his views on truth and pragmatism in general was that of popular lectures where his vivid imagery and rich forms of expression seemed to hide his carefully worked out ideas. Thus, the way he formulated his views was not sufficiently guarded against their being misunderstood. Despite the hostile reception of his theory, however, James defended his views insisting that some of his critics had misread and distorted them. In the preface to *The Meaning of Truth,* he remarks that some of these critics seem to "labor under an inability almost pathetic, to understand the thesis which they seek to refute."[1] Hence, it is not uncommon to find in the literature many a James scholar who tries to defend James's position and to show how it could be established consistently. It can be shown how some commentators in their attempts to defend James against some criticisms have produced a distorted account of James's original views. It is, in my view, most crucial when discussing James to endeavour to see things from his point of view. If his views on truth are to be criticised or dismissed, they must be criticised or dismissed for the right reasons.

2. A THEORY OF TRUTH

James placed his theory of truth at the heart of his pragmatic philosophy. Indeed, when he defined pragmatism, he defined it both as a method and as a 'genetic' theory of what is meant by truth. He did regard it as a *theory*, as a genuine alternative to both the correspondence and coherence theories and as one of his most original

[1]James, MT, 10.

contributions to the study of truth. However, some commentators had a different opinion as to whether what James was defending could rightly be described as a theory of truth or merely be characterised as an account or a criterion of truth. Let us consider some of these views.

In his *The Theory of Knowledge,* D. W. Hamlyn in a chapter on theories of truth dedicates two paragraphs for examining the pragmatic theory of truth. His overall assessment of it is that it is 'founded on a muddle.' Thus he thinks it is not a proper theory of truth that could stand on equal grounds with other traditional theories of truth. It is worthwhile to cite what he actually said:

> William James, the originator of the theory, took over the central idea from C. S. Peirce, but altered it in the process. Peirce had put forward practical usefulness as a criterion of meaningfulness, with the plausible suggestion that a scientific term can be considered meaningful only if its use has practical consequences. James applied this idea (perhaps confusedly) to truth in the attempt to supply a down-to-earth substitute for certainty within the theory of knowledge. But merely to reject the search for certainty by putting something less in its place without diagnosis of the reasons for the demand for certainty in the first place is to some extent an abrogation of the philosopher's responsibility. The pragmatic theory cannot therefore be put on the same level as the other two theories—the correspondence and coherence theories. I shall not discuss it further. (It would not be unfair to say that it is founded on a muddle.)[2]

It is highly likely that Hamlyn's statements about James are the ones which are founded on a muddle.[3] Josiah Royce's question "how the mere pragmatist can feel it

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[2]Hamlyn, *The Theory of Knowledge,* 119.

[3]Hamlyn is ascribing to James the originating of the pragmatic theory of truth while Peirce not James is its originator. The equation of truth with utility is not as straightforward as Hamlyn seems to be implying here. James's theory of knowledge, his turning away from certainties, is itself influenced by the view of science which was dominant in his day. Science in James's time was no longer looking for certainty, and it is quite understandable that a philosopher who takes science seriously, like James indeed was, cannot be blind to its developments. Thus the effects of science as a principal factor in shaping his philosophical views cannot be ignored when assessing his views on truth. This is by no means to suggest that James had given up the search for truth. It is fair to say that James's yearning to know what truth is was one of the major occupations of his life. Hamlyn's last remark about the relation between the pragmatic theory of truth and the correspondence and coherence theories makes one wonders if he had really given James's texts a close examination. One does have the right to dismiss or accept James's views, but one has first to gain the right of doing so by a thorough study of those views.

a duty to think truly",[4] seems to reflect Hamlyn's worries about James's alleged abandoning of the quest for certainty.

G. E. Moore, in his 'pretentious fiasco'[5] "Professor James' 'Pragmatism'", argued that James's notion of truth is really silly. He addressed his criticisms to James's views as they were presented in the sixth lecture of *Pragmatism,* the one entitled, 'Pragmatism's Conception of Truth.' Moore held, among other things, that James wished to establish connections of some sort between truth and verification or utility. He presented the connections which James set out to establish in the form of propositions which he sought to refute by producing counter-examples. James's account of truth did depart from the common-sense usage and that was what mainly provoked Moore's objections.

Some philosophers, such as Bertrand Russell and Nicholas Rescher, argued that James had better offered his views on truth as a criterion rather than a definition of truth. In his 'James's Conception of Truth', Russell argued that "if pragmatists only affirmed that utility is a *criterion* of truth, there would be much less to be said against their view."[6] Russell's objections were quite similar to Moore's. Rescher distinguished between theories of truth which offer a definition of what truth is and those which offer a criterion of truth. Accordingly, what James has really presented to us, he argued, is a criterion of truth and not a definition of truth.[7] F. H. Bradley raised a similar objection. He argued that he had no problem with the successful working of ideas as a criterion for determining their truth. However, the practical working of ideas does not constitute the essence of truth.

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[4]Perry, II, 433.
[5]Described as such by James in a letter to H. M. Kallen, dated January 26, 1908, quoted in MT, 305.
[6]Russell, *Philosophical Essays,* 120.
[7]Rescher, *The Coherence Theory of Truth,* Chapter One, §1, 1-4.

More recently, Gerald Myers in his study of James's life and thought said that "By today's standards, pragmatism is not a genuinely technical theory of meaning or truth; it is rather a method of choosing what to believe from among philosophical and religious propositions."[8] His position seems essentially akin to Russell's.

On the subject of interpretation, there is a wide disagreement among James scholars on the accurate interpretation of his theory of truth. For instance, A. J. Ayer held that James's theory is anti-realistic.[9] H. S. Thayer argued that it was fundamentally realistic.[10] Other interpretations were to some extent concerned with defending James against standard criticisms, especially those of Moore and Russell.[11]

James's characterisation of his pragmatic view of truth was first introduced in the sixth lecture of his *Pragmatism.* This was followed by the volume *The Meaning of Truth* which he subtitled, 'A Sequel to 'Pragmatism'', wherein he collected "all the work of . . . [his] pen that bears directly on the truth-question."[12] The first chapter of the volume, 'The Function of Cognition', was published in *Mind* in 1885. James describes this paper in a letter to C. A. Strong as 'the *fons et origo* of all *my* pragmatism (in its second sense as "theory of truth")'.[13] The rest of the volume consists of papers mainly written in James's later years, between 1904 and 1909, with the principal aim of clarifying his doctrine further, replying to some criticisms and defending and sharpening the theses advocated in *Pragmatism.* Our discussion will draw in great part on what James says about truth in those two volumes.

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[8]Myers, *William James: His life and Thought,* 298.
[9]Ayer's introduction to James's, *Pragmatism and The Meaning of Truth,* xxx.
[10]Thayer, the introduction to MT.
[11]Among commentators who specifically targeted such attacks on James's view of truth are: Sprigge in his *James and Bradley: American Truth and British Reality,* and 'James, Aboutness, and his British Critics'; Hertz in his 'James and Moore: Two Perspectives on Truth'; and Susan Haack in her 'The Pragmatist Theory of Truth.'
[12]James, MT, 4.
[13]Letter from James to Strong, dated September 17, 1907, in Perry, II, 548.

James has given several statements of his conception of truth which reflect the various aspects of his theory. The main features of his account can briefly be outlined as follows. James maintained that there would be no truth had there been no mind (which can only know reality through ideas).[14] Truth is basically a relation between two things: a thought and a reality outside of the thought.[15] Truth-bearers are thus mental items such as thoughts, beliefs or ideas[16] and not propositions.[17] True thoughts are concrete items or things which are possessed by persons at certain times and places. Thus, true ideas are concrete events in the world, having continuous relations with the world into which they fit.

A true idea agrees with the reality of which it is true, while a false idea is one which disagrees with the reality which it concerns. The standard or common view is that agreement means copying. Truth characterised as such is at bottom an empty and empirically vacuous notion. However, it could only be made intelligible if it was 'cashed out' in experiential terms. Hence, true ideas are those which agree with reality, where agreeing means leading, fitting or any other process defined pragmatically. The fundamental process among those various processes is that of verification. Our ideas are true insofar as they are verified or verifiable. Hence James's main claim that the truth of a given thought is not some inert property inherent in it, it is something that happens to it through the process of verification.

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[14]This goes for James for both absolute truth and concrete truths. The postulating of absolute truth necessarily requires the existence of a superior mind, infinite perhaps, that is able to perceive a truth of that sort. In 'Are We Automata?', James says that for "Ideal truth to exist at all requires that a mind also exist." However, a mind with such capacities, even if it was identified with God, is for James 'dimly' real. EP, 44.

[15]James, MT, 91.

[16]James uses these terms interchangeably. I follow him in that.

[17]For James, the term 'proposition' as used by philosophers like Bertrand Russell and G. E. Moore, seems 'expressly invented' to foster the confusion between truth as applied to opinions and truth as applied to the facts which the opinions assert. See MT, 151. Nevertheless, James did at times use the term 'proposition' himself.

When deciding which beliefs to accept, beliefs of any kind whatsoever, we are justified in applying subjective criteria only when objective criteria have proved unhelpful. Thus, we are justified in accepting beliefs as true according to their being satisfactory, useful and emotionally satisfying when and only when objective evidence (logical or empirical) is unattainable. Consistency is another crucial factor in accepting beliefs. A belief is accepted as true if and only if it is consistent with previously held beliefs or causes a minimal change in one's stock of old beliefs. Finally, James held that there are many viewpoints from which the world can be seen or understood. One cannot speak of *the* unique and truest angle of vision. We shall examine these claims in detail showing how using his view of science, James endeavoured to construct a theory of truth based on science's basic assumptions.

3. THE ACCEPTED VIEW OF TRUTH

James recognises the urgent need to overhaul the concept of truth.

> The whole notion of truth, which naturally and without reflexion we assume to mean the simple duplication by the mind of a ready-made and given reality, proves hard to understand clearly. There is no simple test available for adjudicating offhand between the divers types of thought that claim to possess it. Common sense, common science or corpuscular philosophy, ultra-critical science, or energetics, and critical or idealistic philosophy, all seem insufficiently true in some regard and leave some dissatisfaction. It is evident that the conflict of these so widely differing systems obliges us to overhaul the very idea of truth, for at present we have no definite notion of what the word may mean.[18]

The currently accepted notion in question is that of copying, one version of correspondence, which is based on a certain way of looking at the mind's relation to reality. According to this view, truth means the mere copying or simple duplication by the human mind of a fixed, independent and absolute reality. This view is best

[18]James, PRAG, 93-94.

known as the common-sense view of truth which was widely held among philosophers. To James's mind, this view can no longer be held satisfactory. But, on what grounds did James find this notion unsatisfactory? And why is a change of views required?

The reasons are wholly inspired by the developments of science and its methodology which occurred in the second half of the nineteenth-century. James, the committed scientist that he is, firmly held that philosophy cannot ignore those advancements in science. They ought to be applied to philosophy and truth. Describing the state of science and philosophy before 1850, James writes:

> Throughout almost the entire past both Science and Philosophy have been accustomed to suppose that "Truth" must needs consist of a hard-and-fast system of propositions, valid in themselves and eternally, which our minds have only to copy literally. Logic and mathematics had always seemed to constitute such systems, and the entities and laws of physics and chemistry, just as our text-books formulated them, were supposed to be equally "objective."[19]

Thus, James argues that true scientific propositions were expected at the time possess the following properties. They are literal copies of their realities; they are absolute and non-revisable; they are literally objective. What science was expected to be seeking was simply and solely absolute truth, a truth with a big t. Philosophy has also followed the path of science in its quest for absoluteness; for abstract truth with a big t. Thus truth was regarded by many philosophers to be a literal copy of reality. Once an idea is recognised as true it is judged to have been eternally true, one which does not undergo any future revision and also one which does not and cannot be related to human contexts.

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[19]James, ECR, 550.

This notion of absoluteness pursued by science, however, had become too difficult to sustain in the mid-nineteenth century due to some influences which had entered the scientific scene. These influences are described by James as follows.

> First, philosophic criticisms like those of Mill, Lotze, and Sigwart have emphasized the incongruence of the forms of our thinking with the "things" which the thinking nevertheless successfully handles. . . . Second, not only has the doctrine of Evolution weaned us from fixities and inflexibilities in general, and given us a world all plastic, but it has made us ready to imagine almost all our functions, even the intellectual ones, as "adaptations," and possibly transient adaptations, to practical human needs. Lastly, the enormous growth of the sciences in the past fifty years has reconciled us to the idea that "Not quite true" is as near as we can ever get. For investigating minds there is no sanctity in any theory, and "laws of nature" absolutely expressible by us are idols of the popular-science level of education exclusively. Up-to-date logicians, mathematicians, physicists, and chemists vie with one another as to who will break down most barriers, efface most outlines, supersede most current definitions and conceptions, and show most skill in playing about the old material in new ways, limited only by the one rule of the game, that the new thoughts must dip into and coalesce with the material at more than one point of sensible experience.
>
> Thus has arisen the pragmatism of Pearson in England, of Mach in Austria, and of the somewhat more reluctant Poincaré in France, all of whom say that our sciences are but *Denkmittel*—"true" in no other sense than that of yielding a conceptual shorthand, economical for our descriptions. Thus does Simmel in Berlin suggest that no human conception whatever is more than an instrument of biological utility; and that if it be successfully that, we may call it true, whatever it resembles or fails to resemble. Bergson, and more particularly his disciples Wilbois, Le Roy, and others in France, have defended a very similar doctrine. Ostwald in Leipzig, with his "Energetics," belongs to the same school.[20]

This quotation best describes the various views from which James's pragmatism and indeed his theory of truth had emerged. Outlined above are the main points of James's theory of truth. Now listed are the main features of science, as he saw it, and how these bore on his account of truth. It has been established in Part One that James was committed to each of the following propositions:

(1) scientific theories are not literal copies of physical phenomena. They are instruments that represent phenomena only symbolically;

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[20]James, ECR, 550-51.

(2) there exists a multiplicity of formulae which may account for the same physical phenomena; when the choice between rival theories cannot be decided on empirical or logical evidence (evidential grounds), we are justified in applying subjective factors like elegance, simplicity, taste, etc., to assist us in deciding which theory to accept;

(3) science deals with hypotheses which are subject to verification or refutation by experience;

(4) the scientist is not a mere spectator who receives and registers facts but an actor who interacts with the reality which is not fixed but plastic and malleable to his own needs and purposes;

(5) scientific theories are neither absolutely true nor absolutely false; they are revisable and relative; hence, the concept of absoluteness can no longer be applied in science;

(6) when testing a scientific proposition, we also test the whole set of previously held scientific propositions; the condition of consistency;

(7) scientific propositions allow us to make predictions;

(8) physics must be separated from metaphysics.

The influence of the ideas expressed in these propositions in the course of our discussion of the main themes of James's account of truth as outlined above is here examined.

4. TRUTH-BEARERS

Before discussing what it is for something to be true or false in James's view, let us first examine his views on the items to which the predicate 'true' is ascribable. For James, the primary truth-bearers are concrete items such as beliefs, thoughts, or

ideas. He also regards truth as a property of mental images and of names.[21] In 'The Function of Cognition', truth is attributed to feelings. James uses these candidates for the role of primary truth-bearers interchangeably. Unlike many philosophers, such as Russell and Frege, James did not understand beliefs as expressing propositions. James's position regarding propositions is worth exploring in order to understand his account of truth. He thought that the ascription of truth to propositions only induces confusion. He does make, however, occasional uses of them in the course of some discussions.[22] The evidence that he regards their use as truth-bearers by philosophers as unfortunate is well-established in his writings. Let us now look at the way he describes propositions before explaining the real reason for his dismissive attitude towards them.

James asks: To which realities do propositions belong? Do they belong to the world of facts or to the world of ideas? His answer is that they belong to neither. Propositions or 'supposals'[23] are linguistic entities which have no room in either world. They are, he says, mythological beings which are the product of a confusion that arises between truth as an attribute of beliefs and truth as an attribute of the facts which the beliefs assert.[24] Hence, any attempt to explain truth as an attribute of propositions is likely to cause such confusion. James describes this very clearly in a letter to H. N. Gardiner. He writes:

> *"That"* Cæsar existed, *e.g.,* is not an intermediary between the objective fact "Cæsar-existed" and the other objective fact "someone's-belief-that-Cæsar-existed," but a muddle of the two facts, made to appear as a medium of connection between them by granting to it the objectivity of the first fact and the truth of the second. Surely truth can't inhabit a third realm between realities and statements or beliefs. If mythology be a "disease of language," then your [Gardiner's] "supposal" (excellent term, however) is certainly a mythological being. It is easy to see how it arose, for we say indifferently

[21]In Pragmatism, he says: "Names are just as 'true' or 'false' as definite mental pictures are." PRAG, 102.
[22]See for example, PRAG, 122.
[23]This term was suggested and used by H. N. Gardiner. See James's letter to him in Perry, II, 484-85.
[24]James, MT, 151.

> "the fact *that* Cæsar existed," and "the belief that Cæsar existed"; so that it becomes natural to marry fact and belief together by this *tertium quid* of a *that* which is neither fully objective nor fully subjective, and can mean sometimes what is real and sometimes what is true. It seems to me the great merit of pragmatism to have stepped right over all such mongrel figments . . . I wish you'd search your heart seriously about this mongrel cur of a supposal, begotten upon you by the unspeakable Meinong and his English pals.[25]

In a letter to H. M. Kallen quoted in MT, James emphasises the same point:

> Those propositions or supposals which they make the exclusive vehicles of truth are mongrel curs that have no real place between realities on the one hand and beliefs on the other. . . . 'Propositions' are expressly divised for quibbling between realities & beliefs. They seem to have the objectivity of the one and the subjectivity of the other, and he who uses them can straddle as he likes, owing to the ambiguity of the word *that* which is essential to them. '*That* Caesar existed' is 'true,' sometimes means the *fact that* he existed is real, sometimes the *belief that* he existed is true. You can get no honest discussion out of such terms.[26]

James seems to be holding that 'propositions' carry an air of ambiguity while mental items such as beliefs are more adequate and less problematic bearers of truth.

> I do not say that for certain logical purposes it may not be useful to treat propositions as absolute entities, with truth or falsehood inside of them respectively, or to make of a complex like 'that-Cæser-is-dead' a single term and call it a 'truth.'[27]

This use of 'proposition', James protests, is ambiguous because "sometimes it means the *fact* that, and sometimes the *belief* that, Cæser is no longer living."[28] The fact being that which corresponds to the belief.

Whether there is really such a confusion in the realist's use of 'proposition' is doubtful. For 'propositions' are used as neither referring to a subjective thought or belief nor referring to a fact or an event in the world. Propositions are simply used as

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[25]James's letter to Gardiner, dated January 9, 1908, in Perry, II, 485.
[26]James, MT, 305.
[27]James, MT, 151.
[28]James, MT, 151.

terms that allow us to talk about what is believed. James seems to be expecting of 'propositions' as truth-bearers to tell us more than they are generally devised to do. They refer simply to abstract entities. Let us see why did James concentrate on the truth of beliefs or mental items instead. There are two problems that would have confronted James had he chosen propositions, or sentences, as the ultimate bearers of truth. First, he was interested in the problem of how truth-bearers come to be true. Taking propositions to play that role is problematic because it seems to overlook this important problem, as if the problem of intentionality has already been resolved. James has a great interest in the way in which truth-bearers come to be true. In other words, he is interested in the way truth-bearers refer to their realities. Taking propositions as the primary bearers of truth might seem to marginalise the problem of intentionality or take it as if it has already been resolved. Second, the truth and falsity of propositions are independent of human beings and their interests and of place and time. If one took beliefs as expressing propositions, if a belief means, for example, the belief that Cæsar existed, then in this case, the belief seems to have already had an interpretation - presupposing an intentional relation between the belief and its object. While James is interested in finding out what makes a sentence true and what gives it its interpretation. He is not merely interested in what makes an already interpreted sentence true. James's pragmatic account of truth begins with the question of how our ideas refer to their realities. While the intellectualist account of truth presupposes the intentional relation between our ideas and their objects.[29] We shall have more to say about James's position towards intentionality later. The intellectualist account of truth also referred to by James as the copy theory of truth, which he has taken as a foil to his own position, will be examined next.

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[29]J. B. Pratt, for example, who criticised James's account of truth from the point of view of a correspondence theorist, seems to regard the intellectualist notion of truth as presupposing the intentional relation between beliefs and their objects. He writes: "The intellectualist's meaning of truth is so simple, so commonplace, so close at hand, that the pragmatist has quite overlooked it. By the truth of an idea the intellectualist means merely this simple thing, *that the object of which one is thinking is as one thinks it.* Is there anything hard about this, anything meaningless, anything 'metaphysical' or abstract?" Pratt, 'Truth and its Verification', 322.

5. THE COPY VERSION OF THE CORRESPONDENCE THEORY OF TRUTH

James has rightly shown, as was discussed in Part One, that the copy theory fares ill in science. For this theory supposes that the world explored by science has a given objective pattern and that any thesis about the world pretends to be a literal copy of some part of this pattern. Thus, a scientific hypothesis or a theory is accepted as true or rejected as false according to whether it is a literal copy of the reality to which it corresponds or not. James rejected this view. His alternative view is that an hypothesis is accepted as true not because it literally depicts its reality, but because it works. Thus, in science, the agreement of hypotheses or theories with their realities does not mean copying but rather working. In science, James writes,

> [w]e must find a theory that will *work;* and that means something extremely difficult; for our theory must mediate between all previous truths and certain new experiences. It must derange common sense and previous belief as little as possible, and it must lead to some sensible terminus or other that can be verified exactly. To 'work' means both these things.[30]

What makes a scientific theory work is its summing up of past events and its successful prediction of future concrete experimental phenomena. This involves both the occurrence of a minimal change in the previously held propositions and the verification of hypotheses. Thus, truth in science is rooted in the verification of hypotheses. As we have seen in Part One, James recognised the provisional nature of scientific hypotheses and their instrumental character. All theories, including scientific ones, are *"instruments, not answers to enigmas, in which we can rest."*[31]

This characterisation of scientific theories as instruments rather than literal copies of reality necessarily requires the introduction of subjective criteria to the determination

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[30]James, PRAG, 104.
[31]James, PRAG, 32.

of the truth or falsity of those entities. Let us suppose that we have two incompatible hypotheses such as two conflicting theories on the nature of light. According to the copy theory of truth, we must reject one or the other because reality cannot possess the patterns claimed by both theories. On James's view, neither theory is to be rejected, since there is sufficient empirical evidence that supports each theory and each sums up and expands some part of experience. In other words, each is successful as an instrument in the further exploration of physical phenomena and in this sense, both are necessary tools for giving an adequate account of the phenomenon of light.

James's general view about theory choice has been detailed in the previous part. It suffices here just to emphasise his view that in some cases, scientists would choose one or the other of two well-evidenced theories on entirely subjective grounds.

> [S]ometimes alternative theoretic formulas are equally compatible with all the truths we know, and then we choose between them for subjective reasons. We choose the kind of theory to which we are already partial; we follow 'elegance' or 'economy.' Clerk Maxwell somewhere says it would be "poor scientific taste" to choose the more complicated of two equally well-evidenced conceptions; and you will all agree with him. Truth in science is what gives us the maximum possible sum of satisfactions, taste included, but consistency both with previous truth and with novel fact is always the most imperious claimant.[32]

Thus truth in science is primarily but not entirely based upon objective evidence. In some cases, subjective criteria, and most importantly consistency as James characterised it, contribute to the determination of the truth of scientific theories or propositions. James's view of truth gains its basic validity and strength from being more or less an accurate theory of *de facto* method in experimental science. James offers his view of truth as a legitimate extension of his view of science. Having shown that the copy theory of truth does not work in science, James shows that in

[32]James, PRAG, 104.

philosophy also the copy theory of truth equally does not work. Thus, at the beginning of his discussion of truth in *Pragmatism,* James starts with a severe attack on the copy theory of truth. Let us now examine what this theory really tells us about truth and what James's criticisms of it are.

According to the copy theory of truth, truth is a relation of agreement between ideas and their realities or objects, whereby ideas picture or literally copy the realities to which they refer. On this theory, reality objectively obtained and exists independently of our ideas of it. James rejected this bare agreement-formula as meaningless and obscure. His rejection, however, did not seem to be outright at the beginning of his sixth lecture on *Pragmatism.* Let us see what James says about this.

> Truth, as any dictionary will tell you, is a property of certain of our ideas. It means their 'agreement,' as falsity means their disagreement, with 'reality.' Pragmatists and intellectualists both accept this definition as a matter of course. They begin to quarrel only after the question is raised as to what may precisely be meant by the term 'agreement,' and what by the term 'reality,' when reality is taken as something for our ideas to agree with. . . . The popular notion is that a true idea must copy its reality. Like other popular views, this one follows the analogy of the most usual experience. Our true ideas of sensible things do indeed copy them. Shut your eyes and think of yonder clock on the wall, and you get just such a true picture or copy of its dial. But your idea of its 'works' (unless you are a clock-maker) is much less of a copy . . . it is hard to see exactly what your ideas can copy.
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> You perceive that there is a problem here.[33]

What James calls 'the popular notion of truth' is the common-sense view. One serious objection that James raises against this view is that although it is true that some of our ideas do copy their realities, many of our ideas are not exact or even rough copies of their realities. It seems even hard at times to determine what precisely one's idea is actually copying. James identifies the root of this 'vulgar' notion of correspondence as mere copying as lying in the distinction that we draw in ordinary life between mental terms and real terms. We often take, he argues, mental

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[33]James, PRAG, 96.

terms as images and real terms as sensations, holding that in many cases our images copy the sensations.[34] The adequacy of such an explanation may be recognised in objects like clocks. However, it is hardly satisfactory in cases where the thing that is copied is something like the fact that the clock is a mechanical device which works as a time keeper. In cases as such, no image could satisfactorily capture that meaning. James tells us that in "many realities our ideas can only be symbols and not copies. 'Past time,' 'power,' 'spontaneity'—how can our mind copy such realities?"[35]

It has been shown in the previous chapter, in the course of our discussion of James's view of scientific theories, that these theories do not depict reality literally and make no pretence of giving an absolute portrait of things. They are not absolute. They represent reality in a more or less exact manner. James takes this central view in his account of scientific theories and applies it to truth. Here common sense tells us that true ideas are copies which mirror their realities literally. James rejects this naive view arguing that the way our ideas correspond to their realities is far too complex than the copy theory may lead us to think. Its characterisation of the notion of truth in terms of copying is too narrow and simplistic, since there are many cases where our ideas do not simply duplicate their realities.

Furthermore, to assume that the relation of agreement is always that of copying is to assume that truth as copying is essentially an inert and static relation. For if the agreement means in all situations copying, then once an idea is judged as true of something, it is true of that thing and 'there's an end of the matter.' No consequences are to follow. No predictions to be made. This calls for a serious revision of the notion of agreement. For, as it stands now, it is an empty and unintelligible relation

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[34]James, MT, 51.
[35]James, PRAG, 102.

because it is empirically vacuous. That is a crucial reason for James's distrust of the copy relation which he saw as lacking the appropriate empirical credentials.

His attempt to revise the common-sense notion of truth is only one part of his programme of revising several common-sense concepts, such as material substances and the soul, because they do not satisfy his empirical commitments. For example, for James, "The theory of the Soul is the theory of popular philosophy and scholasticism, which is only popular philosophy made systematic."[36] But the concept of "the substantial Soul", James tries to show, "explains nothing and guarantees nothing. . . . our reasonings have . . . only proved its superfluity for scientific purposes."[37] Similarly, he shows that the popular notion of truth, i.e., the common-sense notion of copying, is also scientifically superfluous. Hence, it must be replaced by a theory that goes in line with the spirit and practice of science.

Moreover, James points out that the concepts which are accepted by common sense are also accepted by metaphysics. Just as he tried to separate psychology from metaphysics in his project of establishing psychology from the point of view of positivist science, James sought to provide an empirical account of truth that avoids the postulation of a metaphysical and absolute truth, as postulated by the intellectualists. His alternative account of truth is offered as an account of truth in the plural, of truth with a small t. It has been argued in Part One that James applauded the phenomenalist view of science which called for the separation of physics from metaphysics. Here James extends this to truth, suggesting the elimination of any metaphysical elements that may underlie the concept of truth through revising the common-sense notion of truth held by the intellectualists.

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[36]James, PP, I, 325.

[37]James, PP, I, 331-32. See also PP, I, 15, 181-82, where James associates the views of common sense on the Soul with those of scholastic psychology and concludes that the wisest attitude that would keep our psychology positivistic and non-metaphysical is to take no account of the soul.

Thus, the revision that James proposes is one which clearly departs from the common-sense view of truth as described above. In this bold departure lies the originality of his viewpoint and that is precisely what makes it particularly interesting. This point has been emphasised several times because some commentators insist that James did not reject the copy version of the correspondence theory of truth, that his view of truth is a confused correspondence theory of truth, as Marcus Ford has argued.[38] Thayer thought that James's theory is a specialised version of the correspondence theory.[39] Such interpretations that distort James's theory and fly in the face of what is intended to be original in his theory simply cannot command agreement. Some of these interpretations will be examined later on. As the discussion proceeds, it will be seen how our construction of James's theory takes into account subtle aspects of this theory that have in many cases been overlooked by commentators. Thus, it is hoped that a fair assessment of James's theory can be offered at the end of the part.

6. AGREEMENT PRAGMATICALLY DEFINED

It has been shown that for James, when agreement as copying is regarded as uninformative and empirically empty, it is legitimate to consider revising the whole notion of agreement providing thus a defensible explanation of that relation that could adequately account for all objects or realities,[40] both simple and complex.

If agreement is not copying, what is it then? James tells us that:

> Pragmatism . . . asks its usual question. "Grant an idea or belief to be true," it says, "what concrete difference will its being true make in anyone's actual life? How will the truth be realized? What experiences will be different

[38]Ford, *William James's Philosophy,* 59-74.
[39]See Thayer's introduction to *The Meaning of Truth,* xi-xlvi.
[40]James's conception of 'reality' is rather wide and comprehensive and includes various entities.

> from those which would obtain if the belief were false? What, in short, is the truth's cash-value in experiential terms?"
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> The moment pragmatism asks this question, it sees the answer: *True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we cannot.* That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known-as.
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> This thesis is what I have to defend. The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity *is* in fact an event, a process: the process namely of its verifying itself, its veri-*fication.* Its validity is the process of its valid-*ation.*[41]

Let us examine these passages closely. James starts his analysis of truth with the notion of verification. The verification of ideas is described entirely in experiential terms. To begin with, the notion of truth that James is proposing here is one which is relative to both individual and time. Truth is not, as the rationalists hold, a timeless quality.[42] Thus, we find James associating truth with verification, corroboration and assimilation. These active processes are dependent on both the individual who carries them out and the time where they are being conducted. What constitute the meaning of truth, James tells us, are certain verification-processes. Before examining what these processes are, let us recall very briefly what James thinks about scientific hypotheses. An hypothesis which is subjected to testing and stood up well, in terms of being verified, is considered as true. However, it may turn out later, due to several factors like, for example, the use of more accurate measurements in experiments or the occurrence of some change in our accepted theories, that it is false. Also, an hypothesis that was falsified may turn out to be true, due to similar reasons. James took this idea and applied it to truth. True ideas are those which are discovered to be true. The truth of an idea is not something inherent in it, as the intellectualist asserts, its truth is discovered by us through the process of its verification, 'truth *happens* to an idea'. Accordingly, an idea which was judged as true at one time, and for the first time, by being verified, preserves its truth-value only temporarily; it was discovered

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[41]James, PRAG, 97.
[42]James, PRAG, 105.

as true at that particular moment. Thus, its first verification is an initial step by which it enters into the verification-process. It will, then, undergo further verification by which the true idea may face either of two fates. It may preserve its truthfulness as long as it is not falsified by experience, or lose its truth at the moment it is being falsified. In both cases one cannot maintain that an idea is either absolutely true or absolutely false. An idea may be temporarily false or temporarily true. The verification or falsification of ideas merely gives them temporary truth-values. To put it plainly, absoluteness is not an inherent property of true ideas. Once an idea is true, it is not absolutely true and once it is false, it is not absolutely false. This seems highly to be James's position on the temporality of truth. He seems to contrast his view, the one we have just been describing, with the view held by intellectualists which considers truth to be absolute. James saw the common-sense view of truth as one such view that totally opposes his view.

It is thus crucial to be clear about James's usage of terms such as 'verification'. If this term were understood in a common-sense way, then the equation of truth with verification which James is offering as a criterion of truth would be rightly dismissed as false. Similarly, in James's equation of what is true with what is useful, the term 'utility', as we shall see later, is used in a way that also departs from the common-sense usage.

G. E. Moore, in his criticisms of James's pragmatism, argues that James's equation of truth with verification fails to reconcile with the common-sense usage.[43] Moore shows this by showing that there are true propositions which become false when 'is verified' is substituted for 'is true' in the propositions that 'what is true is what is verified' and that 'what is verified is what is true'. One cannot deny that it is true that

[43]Bertrand Russell was also a leading opponent of the objection that James's account of truth fails to square with common sense. However, I focus only on Moore's criticisms as representative of this line of argument.

it is possible that a proposition p is verified, even though it is not the case that p is true. However, when 'is verified' is substituted for 'is true', we end up with the necessarily false proposition that it is possible that a proposition p is verified, even though it is not the case that p is verified. Moore applies the same analysis to utility. Once 'is useful' is substituted for 'is true', we face a similar result to the effect that 'is useful' is not synonymous with what 'is true'. Moore and others, who raised these objections, are appealing to the common-sense law of bivalence which states that, for every proposition p, either it is true that p or it is true that not-p. This law ceases to be true once 'is verified' is substituted for 'is true'. The reason is that not every proposition is either verified or its denial is verified. This shows that 'is verified' is not synonymous with 'is true'. Hence, our conclusion is that James cannot hold consistently both to his pragmatic account of truth and to the law of bivalence upon which Moore's, and indeed the realist's, accounts of truth are based. To give a fair assessment to his equation of truth with verification, one should not appeal to the common-sense analysis to which Moore and others have resorted. This analysis seems to overlook the fact that James is using verification in a different sense.

This tension between James's view of truth and the common-sense view, in the way we presented it, i.e., in terms of the former's inconsistency with the law of bivalence, is best described by James in 'A Dialogue' between two opponents. On one side there is 'a pragmatist', i.e., James, and an 'anti-pragmatist'; a sharp critic who adopts the common-sense view, on the other. The anti-pragmatist confronts James with a 'bad dilemma'. He says to him:

> Now suppose a certain state of facts, facts for example of antediluvian planetary history, concerning which the question may be asked: 'Shall the truth about them ever be known?' And suppose (leaving the hypothesis of an omniscient absolute out of the account) that we assume that the truth is never to be known. I ask you now, brother pragmatist, whether according to you there can be said to be any truth at all about such a state of facts. Is

> there a truth, or is there not a truth, in cases where at any rate it never comes to be known?[44]

The anti-pragmatist continues that this question puts James in a bad dilemma for the following reasons:

> [I]f on the one hand you elect to say that there is a truth, you thereby surrender your whole pragmatist theory. According to that theory, truth requires ideas and workings to constitute it; but in the present instance there is supposed to be no knower, and consequently neither ideas nor workings can exist. . . . if you elect to say that there is *no* truth under the conditions assumed, because there are no ideas or workings, then you fly in the face of common sense. Doesn't common sense believe that every state of facts must in the nature of things be truly stateable in some kind of a proposition, even tho in point of fact the proposition should never be propounded by a living soul?[45]

The dilemma which the anti-pragmatist is proposing for James is the following. You cannot hold consistently to both the pragmatic account of truth and common sense. You could either accept common sense and in this case, reject your account of truth, or you can stick to your pragmatic account of truth and acknowledge your departure from common sense. In other words, James is confronted with the choice between accepting or rejecting the law of bivalence.

James replies that common sense is correct in its assertion that there are truths which will never come to be known by any person. He tells his critic that he is wholeheartedly willing to accept this on the condition that, James says, "you let me hold consistently to my own account of truth, and do not ask me to abandon it for something which I find impossible to comprehend."[46] But, if James is sticking to his position of ascribing truth to thoughts or beliefs, then how can he account for the fact that there are truths about unthought events or things? James admits that on his

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[44]James, MT, 154.
[45]James, MT, 154-55.
[46]James, MT, 155.

account of truth-bearers as mental items, there cannot be truths about unthought things. To solve this problem, he distinguishes between two types of truths: virtual truths and actual truths. Thus, there cannot be actual truths about unthought things, there can only be virtual truths about them, however. James puts this point to his critic as follows:

> There have been innumerable events in the history of our planet of which nobody ever has been or ever will be able to give an account, yet of which it can already be said abstractly that only one sort of possible account can ever be true. The truth about any such event is thus already generically predetermined by the event's nature; and one may accordingly say with a perfectly good conscience that it virtually pre-exists. Common sense is thus right in its instinctive contention.[47]

How to interpret those virtual and actual truths remains the key difference between the pragmatist and the anti-pragmatist. James does not think that virtual truth about an event, or fact, could be expressed by claiming that if a person had acquired a belief about that fact, then that belief would actually be true. One acquires actual truth through a verification-process which terminates in a direct perception of the fact or a substitute for it, like the case of theoretical terms such as atoms. Virtual truth becomes actual when and only when the process of verification is completed, as we have just described. In this sense, truth is something that 'happens' to an idea. It becomes true by the process of its verification. This understanding of truth requires for truth and knowledge to be "correlative and interdependent."[48] As James says, "wherever knowledge is conceivable truth is conceivable, wherever knowledge is possible truth is possible, wherever knowledge is actual truth is actual."[49]

James also talks about direct and indirect verification. At the basic level of common sense, full verification is achievable. This simple form of verification is the

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[47]James, MT, 155.
[48]James, MT, 158. James regularly shifted from the notion of 'truth' to that of 'knowledge'. For him, a thing which is true is one which is thought, believed or asserted by a knower.
[49]James, MT, 158.

foundation of truth-processes. They *"are certainly the originals and prototypes of the truth-process"*.[50] However, we accept many ideas as true without attempting to verify them directly. In fact, most of the beliefs that we hold as true are verified only indirectly. James tells us that "Where circumstantial evidence is sufficient, we can go without eye-witnessing. Just as we here assume Japan to exist without ever having been there."[51] These indirect verifications are dependent on direct verifications. Without "direct face-to-face verifications", James says, "the fabric of truth collapses like a financial system with no cash-basis whatever. . . . beliefs verified concretely by *somebody* are the posts of the whole superstructure."[52] Here it should be noted that indirectly verified truths are not the same as virtual truths. The former are truths which have not been exhaustively verified. We accept them, however, because there are masses of circumstantial evidence which we take as enough for us for not attempting the task of directly verifying those ideas which we accept as true. In this case, those ideas are backed by empirical evidence and directly verified ideas.

Hence, indirectly verified truths must be distinguished from virtual truths. The latter expresses what would have been discovered or known (i.e., the truth of the idea) had the idea been appropriately tested. Indirectly verified truths only state the existence of the possibility of being verified.

> The truth of an event, past, present, or future, is for me only another name for the fact that *if* the event ever *does* get known, the nature of the knowledge is already to some degree predetermined. The truth which precedes actual knowledge of a fact means only what any possible knower of the fact will eventually find himself necessitated to believe about it.[53]

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[50]James, PRAG, 99.
[51]James, PRAG, 99.
[52]James, PRAG, 100.
[53]James, MT, 157.

Ideas which are at one time actually verified were previously true virtually. "Pragmatically, virtual and actual truth mean the same thing: the possibility of only one answer, *when once the question is raised.*"[54] Thus instead of saying with common sense that for every proposition p, either p is actually true or not-p is actually true, James replaces this by saying that for very proposition p, either p is virtually true or not-p is virtually true: that if there were a knower who would appropriately perform certain tests, he would discover that either p is true or not-p is true. In other words, this can be equally expressed by stating either that p is verifiable or not-p is verifiable.

Accordingly, James replies to the second horn of the dilemma which the anti-pragmatist had presented to him by thinking of truth as a "mere abstract possibility, so I say it does exist, and side with common sense."[55] This abstract possibility is that of there existing a knower who verifies the idea in question. James's account of the common-sense view of abstract truth is that it "might be only another name for a potential as distinguished from an actual knowledge of the reality. . . . [It is] knowledge in the form of possibility merely."[56] This siding with common sense which James is trying to point out by holding to an abstract possibility seems to be incompatible with some of his basic claims about the properties of true ideas. The main issue is that an abstract possibility neither resides in time or space nor does it possess any sensible properties, and therefore abstract propositions are held by common sense. This seems to go against James's project of giving an empirical account of truth.

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[54]James, MT, 60.
[55]James, MT, 159.
[56]James, MT, 157-58.

Another way in which James departs from common sense is in his insistence that the truth of a belief that p does not entail that p is the case and p does not entail that the belief that p is true. This he states as follows:

> The social proposition 'other men exist' and the pragmatist proposition 'it is expedient to believe that other men exist' come from different universes of discourse. One can believe the second without being logically compelled to believe the first; one can believe the first without having ever heard of the second; or one can believe them both. The first expresses the object of a belief, the second tells of one condition of the belief's power to maintain itself. There is no identity of any kind, save the term 'other men' which they contain in common, in the two propositions; and to treat them as mutually substitutable, or to insist that *we* shall do so, is to give up dealing with realities altogether.[57]

Here 'it is expedient to believe that other men exist' means 'it is true that other men exist.' We shall examine later James's precise use of the term 'expediency'. Now, James's claim both that p does not entail the truth of p and that the truth of p does not entail p seems to be consistent with his views concerning the relativity of truth to both time and person. A proposition becomes true in the course of experience, when and only when its practical consequences are actually verified. When a proposition is discovered to be true, it sheds a backward light making it to have been true despite the fact that no past thinker had ever thought so.[58] Thus, for a proposition p which is discovered to be true today, James would not say that it has been true that p before p was discovered to be true. He would, rather, insist that it had been true that p only because p has now been discovered to be true.

Hence, James is not committed to the formula that for any proposition p, p is true iff p. This formula, however, would be accepted by the copy theory of truth for which a proposition p is true iff it is a copy of a fact. What we have tried to show above is that James's association of truth with terms such as verification and confirmation

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[57]James, MT, 150.
[58]James, PRAG, 107.

clearly departs from ordinary usage and is opposed, as he thought it was, to the copy theory which views truth as absolute. He argued that the copy theory's characterisation of the relation of truth flies in the face of the practice and spirit of science. He thought that his theory of truth fits well with scientific attitudes.

As we have seen, James starts his analysis of truth with the notion of verification. He characterises the verification of ideas in wholly experiential terms. He tells us that an idea has "associates peculiar to itself, motor as well as ideational."[59] The verification of an idea happens when the actions and other ideas associated with it follow an acceptable pattern of succession thereby leading us

> into or up to, or towards, other parts of experience . . . The connexions and transitions come to us from point to point as being progressive, harmonious, satisfactory. This function of agreeable leading is what we mean by an idea's verification.[60]

This idea of 'leading' requires a close examination. The leading of an idea may be 'towards' as well as 'into' the independent reality or, more broadly, into the neighbourhood of or into the universe of its independent reality. James characterises the realities with which true ideas agree in the following.

In *Pragmatism,* he tells us that:

> Realities mean . . . either concrete facts, or abstract kinds of things and relations perceived intuitively between them. They furthermore and thirdly mean, as things that new ideas of ours must no less take account of, the whole body of other truths already in our possession.[61]

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[59]James, MT, 96.
[60]James, PRAG, 97.
[61]James, PRAG, 102.

Realities include both the empirical and the abstract or the conceptual. The focus here is on empirical reality.[62] Empirical reality, for James, is a 'world of pure experience', a continuous world of thoroughgoing objective relatedness. Things that belong to reality are conjoined one and all by a continuous manifold of relations that more or less smoothly lead from one thing to another. This definition applies to the other two kinds of realities which are not the focus of our discussion here. It is clear that James needs a different account of the relation between ideas and reality than that of correspondence. The latter relation simply does not fit with such an interpretation of reality. An account is needed of the relation of truth that accounts well for reality defined as such.

In MT, James distinguishes between two types of relations, 'saltatory' relations and 'ambulatory' relations.[63]

> Now the most general way of contrasting my view of knowledge with the popular view (which is also the view of most epistemologists) is to call my view ambulatory, and the other view saltatory.[64]

As said earlier, what James says about 'knowledge' or 'cognition' applies also to truth. In a saltatory relation there is an instantaneous leap from the idea to its object. The common-sense relation of correspondence is an example of a saltatory relation which James had rejected for being mysterious and empirically vacuous. For it does not tell us how our ideas refer to their objects. In contrast, James holds that the relation of truth which connects an idea with the object to which it refers is an ambulatory relation. In ambulatory relations, ideas lead us through intervening experiences to a direct perception of the object to which they refer or to one or other of their associates, whether these are other ideas or mental states of another person or

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[62]The third meaning of reality is discussed later on.
[63]James attributes this distinction to Strong.
[64]James, MT, 79.

unobservable scientific entities. Ambulation becomes constitutive of the relation of truth. Truth is *made* by the ambulation through the intermediate experiences.[65] These intermediate experiences lead from ideas to their objects or from the knower to the known. Those empirical intermediaries constitute the workings of true ideas. These ideas are found in James's writings at various periods. In his essay 'A World of Pure Experience', published in 1904, James says:

> Whenever certain intermediaries are given, such that, as they develope [sic] towards their terminus, there is experience from point to point of one direction followed, and finally of one process fulfilled, the result is that *their starting-point thereby becomes a knower and their terminus an object meant or known.*[66]

Again

> Pragmatists are unable to see what you can possibly *mean* by calling an idea true, unless you mean that between it as a *terminus a quo* in someone's mind and some particular reality as a *terminus ad quem,* such concrete workings do or may intervene. Their direction constitutes the idea's reference to that reality, their satisfactoriness constitutes its adaptation thereto, and the two things together constitute the 'truth' of the idea for its possessor. Without such intermediating portions of concretely real experience the pragmatist sees no materials out of which the adaptive relation called truth can be built up.[67]

Thus the workings of true ideas establish the 'agreement' pragmatically defined between true ideas and their objects to which they refer. What distinguish true ideas are chains of empirical intermediaries that run from these ideas to reality. This characterisation of agreement is also found in *Pragmatism,* where James writes:

> To 'agree' in the widest sense with a reality, *can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed.*[68]

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[65]James, MT, 80.
[66]James, ERE, 29.
[67]James, MT, 129-30.
[68]James, PRAG, 102.

In 'The Function of Cognition', James has already formulated this pragmatic account of agreement between ideas and reality. He says that

> *a conceptual feeling, or thought, knows a reality, whenever it actually or potentially terminates in a percept that operates on or resembles that reality, or is otherwise connected with it or with its context.* The latter percept may be either sensation or sensorial idea; and when I say the thought must *terminate* in such a percept, I mean that it must ultimately be capable of leading up thereto—by the way of practical experience, if the terminal feeling be a sensation; by the way of logical or habitual suggestion, if it be only an image in the mind.[69]

This leads us directly to James's account of intentionality. For once one rejects the copy notion of truth, which regards thought a mere duplicate of reality, one is faced with the problem of giving an account of how thought can know or be 'about' reality. James was confronted with this problem having already rejected the copy-theory epistemology. Hence, he had to provide an account of the aboutness of thought. The same series of empirical intermediaries that go between the idea and its reality constitutes the foundation both James's account of agreement between thought and reality and his account of intentionality. His empirical account of truth follows naturally from his account of intentionality as we shall now see.

The truth of our ideas depends on both how the world really is and what these ideas are about. As remarked earlier, James's account begins with the question of how our ideas can be about what they are, or how our ideas can know realities independent of them? James expresses this puzzling question in the following.

> Although we cannot help believing that our thoughts *do* mean realities and are true or false of them, we cannot for the life of us ascertain how they *can* mean them. If thought be one thing and reality another, by what pincers, from out of all the realities, does the thought pick out the special one it intends to know?[70]

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[69]James, MT, 27-28.
[70]James's review of Royce's *The Religious Aspect of Philosophy* in ECR, 386.

In the case of sense-perception, James told us in the quotation above that one's ideas can know things outside one's perceptual field by being capable of leading one through a series of intermediary experiences that would terminate in an actual percept of the object referred to. For instance, my idea of my violin is regarded as 'cognitive' of my real violin because the actual fabric of experience is constituted in a way that makes the idea capable of leading into a chain of other experiences which terminate at the end in a vivid sense perceptions of a small instrument with four strings and a bow which is the violin. My being led to the violin does not merely *indicate* what I have been thinking about. Rather, the leading relation is supposed to be *constitutive of the intentional one.* The objects that we practically operate on are the same ones that our ideas refer to. My percept of the violin does not only verify my idea of it; proving "its function of knowing that percept to be true,"[71] the existence of the percept, in which the series of intermediaries terminates, also indicates that it was to what my idea has referred. James's account here is rather the contrary to what we commonly assume. On his account, the 'direction of fit' between the violin and my attempt to identify it suggests that it is the violin which adjusts itself to my inquiries rather than the other way around. My idea of the violin refers to the violin because if I had to identify the violin, I would eventually track it down.

The next obvious question is how can the cases be accounted for in which the object referred to is mis-located? If the ideas are constituted by the chain of intermediaries which extends back to the object itself, then it seems rather difficult to account for the cases where our ideas misidentify their objects. In general, the problem is: how can false ideas or error be accounted for?

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[71] James, MT, 64 and also ERE, 31.

Let us again use a similar example to illustrate James's answer. On his explanation, when thinking of a book which I should take to the library for renewal and have left in my room, my idea of the book will determine the direction of my way to the place were the book is. My idea of it will endure until the sensible presence of the book is there. So my idea of the book is cognitive of the actual book in which it terminates. Now, if I went back to my flat to get the book and picked up accidentally another book, then I have committed a mistake having picked up the wrong object. But having picked up the wrong book does not imply that my idea all the way was of the wrong book. If the leading process does create the function as James was just saying, then it seems unlikely that this result could be avoided. James does, however, provide an account of error that would avoid this outcome. In 'The Function of Cognition', he says that an idea

> *knows whatever reality it resembles, and either directly or indirectly operates on.* If it resemble without operating, it is a dream; if it operate without resembling, it is an error.[72]

An example of error which James gives is that of an idea that operates on a reality which it resembles only partially and one that does not intend. In contrast, a true idea is one which resembles the object it refers to more completely.[73] Such as in the case where I picked up a different book thinking that it was the book that I wanted to pick up. Accordingly, in order that I refer to the book successfully, I should not only operate on the book but also that it should be the one that most resembles my idea. Hence, the object of the wrong book partially resembles my original idea, while the right book resembles my idea more completely rather than partially.

On this account, we can say that the object that partially resembled my original idea is one that does not prove to harmonise with my general set of beliefs while the idea that resembled its referred object more completely is the one that fits harmoniously

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[72]James, MT, 26.
[73]James, MT, 26.

with my previous set of beliefs. However, it should not be concluded that James's account is no more than a resemblance theory. If it was so concluded, then we are committing ourselves to holding that James's account has nothing to do with our investigations and interests. This is by no means the case. The appeal to resemblance may only pose some constraints on our inquiries and interests but it does not make the only determinant factor in deciding the truth of ideas. The reason is that if it were the only determinant, then James's account would become impossible. For he thinks, against the copy theory, that an idea may be equally satisfied by a number of objects. For our future inquiries and interests play an important role in deciding the degree of truth that we ascribe to ideas. The copy-theory epistemology that takes ideas as exact portraits of the objects to which they refer obviously holds that there is only one way in which a true idea can refer to its reality, and that is by copying it. This leaves no room for the contribution of our interests and future investigations and the role that our previously held beliefs play. Moreover, even if an idea copied its reality so closely, we would still have to account for the way in which that idea refers to *this* particular reality rather than another reality that may resemble it. So some common intermediary experiential environment constitutes the basis for the reference of this idea to that reality.[74] There are various types of relations that hold between our ideas and the objects to which they refer. These are:

> (1) Our thoughts and our acts, with the relations between them;
> (2) Our acts and our "objects," with the relation between *them* (environmental). These are direct relations. Another direct relation that obtains only in cases of maximum knowledge of the object is
> (3) that our thoughts shall *resemble* it, the more completely the better, so to be "true" *portraits* of it.
> (4) The fourth relation is the indirect one, between the thought and *that* object, established by means of (1) and (2).[75]

[74]James's letter to Strong, Perry, II, 544.
[75]Perry, II, 545.

The essential point that James is making is that in order to establish reference one needs both (1) and (2). Both are necessary in order to establish (3) and (4). Resemblance by itself is not sufficient to account for why an idea refers to that particular reality. In fact (1) and (2) give the account for (3) for ideas cannot be portraits of reality "unless there be some real path to the individual thing portrayed"[76] by being led into its general environment by a chain of intermediary experiences. These experiences, as said earlier, terminate in a direct sense percept somewhere.[77] Thus, reference "demands (1) and (2), and gives (4) when taken abstractly and saltatorily; while the *perfection* of knowledge, or of "truth," requires (3) as well."[78]

This classification of the relations by which an idea can be true of its object suggests that truth may have degrees. At its highest level, truth becomes absolute or perfect. This level can be, James seems to be saying, based on direct and indirect relations which are assumed to be of a lower degree, culminating in a type of truth according to which ideas become exact 'portraits' of their objects. Besides this distinction between types of truth, James distinguishes between different types of objects for ideas to know that start from sensations up to the thing-in-itself. The truths that we have of these objects range from the imperfect symbolic and representative to the perfect absolute. James calls our knowledge of absolute truth as adequate knowledge as opposed to inadequate knowledge which we possess of objects other than absolute realities. The knowledge of the latter is one that is obtained by 'absolute telepathic confluence' in which case the idea and its object are identified.[79]

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[76]Perry, II, 545.
[77]James says: "The paradigms to which all cases reduce are direct percepts of relation, ethical, mathematical, or what not; and these are not "true" so much as "real." They correspond to sense percepts in the realm of outer fact." Perry, II, 547.
[78]Perry, II, 545.
[79]See James's letter to C. A. Strong, dated July 1, 1907 in Perry, II, 538.

Thus James provides two types of truth: (1) empirical truth which is established by the process of verification by which we accept ideas; (2) absolute truth which is established by confluence and in which an idea is identified with its object. It appears at once that there is a problem here. If James is arguing for an empirical account of truth that analyses it in terms of the working of ideas in an experiential context, then his adherence to an absolute truth established by confluence seems to lead to unavoidable contradiction or inconsistencies. Although he argues for this type of truth, however, he is seen at times willing to give up this notion of absolute truth quite easily. In a letter to C. A. Strong, James writes:

> I see no obstacle to supposing that such telepathic fusion might some time be realized, but if you consider it eternally impossible or self-contradictory, drop it. I only used it *ad hominem* as a type of what my adversaries *might* mean by absolutely final truth.[80]

Perry points out that this type of absolute truth, which sounds rather mystical, is different from the notion of ideal truth which is based on the idea of agreement.[81]

7. ABSOLUTE TRUTH

While defining truth as relative to person and time, James postulates the notion of the 'absolutely true'. The notion of truth as an ideal and absolute seems at odds with his pragmatic view of truth. It is not clear if he was really committed to such a view. The postulation of this type of truth may be due to James's major concern to preserve the objectivity of truth. The origin of this idea can be traced back to Duhem. A physical theory, Duhem tells us, is a classification of experimental laws and not a mere representation of them. A theory brings different experimental laws together

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[80]Perry, II, 540.
[81]See Perry's footnote to James's letter to C. A. Strong in Perry, II, 540.

forming a certain order and classification among them. The classification of laws of different phenomena under different categories makes the use of these laws in solving problems easier and more convenient. "Order, wherever it reigns," Duhem says, "brings beauty with it. Theory not only renders the group of physical laws it represents easier to handle, more convenient, and more useful, but also more beautiful."[82]

This order and organisation that physical theories show makes it "impossible for us to believe that this order and this organization are not the reflected image of a real order and organization."[83] But since physical theories are only concerned with the data of observation, they cannot disclose to us any order that goes beyond sensible experience. Thus,

> the more complete it [physical theory] becomes, the more we apprehend that the logical order in which theory orders experimental laws is the reflection of an ontological order, the more we suspect that the relations it establishes among the data of observation correspond to real relations among things, and the more we feel that theory tends to be a natural classification.[84]

It is in the nature of the method that the physicist employs in investigating physical phenomena that it cannot be used to prove or disprove the existence of real relations that correspond to the relations which are established by the theory. In this case, when the logical evidence is not available, the matter may legitimately be decided on subjective grounds.

> Yielding to an intuition which Pascal would have recognized as one of those reasons of the heart "that reason does not know," he [the physicist] asserts his faith in a real order reflected in his theories more clearly and more faithfully as time goes on.[85]

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[82]Duhem, *Aim,* 24.
[83]Duhem, *Aim,* 26.
[84]Duhem, *Aim,* 26-27.
[85]Duhem, *Aim,* 27.

Hence, natural classification is, for Duhem, an ideal form of a high degree of perfection towards which physical theory aspires to arrive. Since this ideal form transcends the world of appearances or phenomena, it is not in the power of the scientist who applies his methods in constructing physical theories in the world of appearances to provide a rationally argued answer to the question of whether or not this ideal order exists. However, the scientist can feel free to adopt this notion as a mere act of faith and not of reason.

This brief discussion of Duhem's view of natural classification has for intent preparation for examining James's arguments for absolute truth which run on similar lines. James also distinguishes between what he calls "the sensible order and . . . the ideal order."[86] This characterisation is similar to Duhem's. James admits this distinction but, unlike Duhem, he attempts to provide an empirical account of the ideal order. It can now be shown that James's attempt to give such an account fails terribly. His notion of absolute truth is confused and in fact superfluous to his empirical account of truth. It is a view that seems difficult to square with his declared antipathy for abstractions. He was always interested in truth in the plural, holding that truth with a capital T is a mere abstraction. His adherence to it is best taken as a mere act of faith on his part.

In *Pragmatism,* James writes:

> The 'absolutely' true, meaning what no farther experience will ever alter, is that ideal vanishing-point towards which we imagine that all our temporary truths will some day converge. . . . Meanwhile we have to live to-day by what truth we can get to-day, and be ready to-morrow to call it falsehood. Ptolemaic astronomy, euclidean space, aristotelian logic, scholastic metaphysics, were expedient for centuries, but human experience has boiled over those limits, and we now call these things only relatively true, or true within those borders of experience. 'Absolutely' they are false; for we know

[86]James, PRAG, 101.

> that those limits were casual, and might have been transcended by past theorists just as they are by present thinkers.[87]

The same point is emphasised in MT:

> Truth absolute, he [the pragmatist] says, means an ideal set of formulations towards which all opinions may in the long run of experience be expected to converge.[88]

James also characterises the absolute truth as

> *an ideal opinion in which all men might agree, and which no man should ever wish to change.*[89]

Let us examine these passages in detail. Absolute truth as James understood it can be characterised by the following. Firstly, it is objective in the sense that it transcends the subjectivity of individual truths held by any individual. Thus, there is a natural progressive development of truths from the subjective to the objective, from the less perfect to the more perfect. Secondly, since it is an ideal limit to which relative truths may in the future converge: it is fixed, independent of person, time and circumstance and can never be replaced by a better set of truths. Thirdly, it can be described entirely in experiential terms and at the same time it is expected to be objective in the sense of being independent of what any individual may think. Fourthly, James's move from relative truths to absolute truths can only be achieved through the admission that truth has degrees. Thus, individuals, by sharing their knowledge and exchanging ideas via social intercourse, are able to interpret and predict a whole range of experiences. They become more competent at reaching more objective truths which culminate in an ideal limit that cannot be exceeded by a better sort of truth.

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[87]James, PRAG, 106-07.
[88]James, MT, 143.
[89]James, MT, 142.

Having rejected the common-sense notion of truth according to which truth is independent of experience, to preserve some objectivity to truth, James posits absolute truth whose content, however, is entirely experiential. He seems to be using the concept of absolute truth in different ways or meanings though he does not explicitly distinguish between these different uses.

In one usage, James distinguishes absolute truth from relative truth by claiming that the former is not in the position of being overthrown or refuted by the further experience of any individual or individuals. Thus, absolute truth can be described as the kind of truth where there is no possibility that it may be refuted by future experience. An example that James gives which represents this meaning of absolute truth is given in his ERE.

> [T]he immediate experience in its passing is always 'truth,' practical truth, *something to act on,* at its own movement. If the world were then and there to go out like a candle, it would remain truth absolute and objective, for it would be 'the last word,' would have no critic, and no one would ever oppose the thought in it to the reality intended.[90]

Thus, at the moment that the world would end, the beliefs held by individuals become absolutely true. For in this case, there would be no experiences that might render any beliefs refuted. However, one might argue that since there are no consequences to follow from those beliefs, the talk about their truth-value at that circumstance is meaningless. Absolute truth, in this meaning of it, would be a pragmatically meaningless notion. Thus, we have here beliefs which are both true and meaningless.

The second way in which James understands the notion of absolute truth is as an ideal limit towards which human opinions converge with respect to a certain topic.

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[90]James, ERE, 13. In a footnote to the word 'truth' in this passage, James writes: "Note the ambiguity of this term, which is taken sometimes objectively and sometimes subjectively."

How this idea of convergence is to be understood is what we shall now examine. The first question to be raised is the following: is the convergence at issue one of total agreement among individuals to a certain limit or proposition or does the convergence concern the actual content of the proposition agreed upon? Some passages suggest that the convergence sought is one of total agreement. In addition to the passages cited at the beginning of our discussion of absolute truth, the following clearly emphasises this answer. James tells us that "the more fully men discuss and test my account, [of truth] the more they will agree that it *fits,* and the less will they desire a change."[91]

When the pragmatist defines absolute truth, James says, he postulates, among other things, "that there is a tendency to such convergence of opinions, to such ultimate consensus."[92] So it seems that the convergence that James is holding is, in one sense, one of extensive agreement among individuals. In this sense, if all individuals come to agree on a limit, then this limit would certainly be absolutely true because it will not be refuted by any individual and thus will not be judged as false by any individual. Thus, assuming the first meaning of absolute truth, the limit to which all opinions have converged would be pragmatically absolutely true.

James also introduces another meaning of absolute truth according to which agreement among individuals is not the most crucial element in defining absolute truth. Truth, he says, neither follows "the counting of noses, nor is it only another name for a majority vote."[93] He allows that beliefs which are subject to total agreement might actually be false.

> That men do exist who are 'opinionated,' in the sense that their opinions are self-willed, is unfortunately a fact that must be admitted, no matter what

[91]James, MT, 142.
[92]James, MT, 143-44.
[93]James, MT, 144.

> one's notion of truth in general may be. But that this fact should make it impossible for truth to form itself authentically out of the life of opinion is what no critic has yet proved. Truth may well consist of certain opinions, and does indeed consist of nothing but opinions, tho not every opinion need be true. No pragmatist needs to *dogmatize* about the consensus of opinion in the future being right—he need only *postulate* that it will probably contain more of truth than anyone's opinion now.[94]

Here James is fully aware of the various elements that contribute to the formulation of beliefs. He recognises that some opinions are better than others, that the scope and type of one's experiences are co-determinants of the beliefs that one holds as true. The experiences upon which the opinions of individuals are formed are experiences of an independent reality "the existence of which all opinions must acknowledge, in order to be true."[95] Here James is trying to show that the fact that absolute truth is comprised of individual opinions does not detract from its objectivity, for those opinions are founded on or related to objective facts. In this way, he shows that his account of absolute truth remains within experiential boundaries and retains its objectivity. James recognises that the total agreement is neither a necessary nor sufficient condition for establishing absolute truth.

James agrees that the more we come to agree on a matter, the closer we come to absolute truth. However, it does not follow that absolute truth should be defined in terms of complete consensus. Having said that convergence as agreement is not necessary for establishing absolute truth, let us now consider the second meaning of convergence which concerns the actual content of the ideal limit. James refers to this type of convergence as the regulative notion of truth. In *Pragmatism,* he writes:

> The regulative notion of a potential better truth to be established later, possibly to be established some day absolutely, and having powers of retroactive legislation, turns its face, like all pragmatist notions, towards concreteness of fact, and towards the future. Like the half-truths, the absolute truth will have to be *made,* made as a relation incidental to the

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[94]James, MT, 145.
[95]James, MT, 145.

> growth of a mass of verification-experience, to which the half-true ideas are all along contributing their quota.[96]

An absolute truth which may be ascertained some day is a regulative notion which can only be made sense of within the world of concrete fact. In the sense James describes, a 'better truth' with 'powers of retroactive legislation' as a truth which provides the ideally best explanation or account of our experience. Thus characterised, it is the ideal limit which is entirely objective. It is so because it can never be superseded or improved upon in the future. Note here that this absolute truth includes the first meaning of absolute truth, in the sense that it cannot be refuted by future experience.

Furthermore, James seems to be holding that although, at the present moment, we cannot, within the limits of our own experience, and the beliefs that we now hold provide evidence for the existence of absolute truth, we can still hold that it does exist. James's attempt to adhere consistently to an empirical account of truth and a notion of absolute truth is likely to fail because the tension between these two different types of truth cannot be resolved in the way that he seems to be suggesting. On his characterisation of absolute truth as regulative notion, absolute truth is independent of the experiences of individuals. The fact that a set of propositions may be the best explanation of experience and thus be regarded as absolutely true, is independent of whether this set is believed to be true in the present or in the future by any individual. Furthermore, we are not in a position to empirically determine that this set of proposition will ever be identified as such. Yet we assume that this set of propositions can be true knowing that it is possible that it will never be recognised as such. If it is considered James's view that every proposition, scientific or otherwise, is subject to revision or rejection in the light of future experience, it would

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[96]James, PRAG, 107.

seem obvious that the set of propositions which is absolutely true is likely to be in contradiction with this claim.

One might then conclude that James cannot consistently combine his notion of absolute truth and his empirical account of truth. For on James's account we can hold that some ideal set of propositions is absolutely true at the present, although we do not have any empirical grounds for accepting it. This notion of the 'absolutely true' seems also at odds with some of James's fundamental views of scientific theories which are against the idea of convergence towards one theory. As we have argued in Part One, James held that any given phenomenon may be equally well accounted for by more than one theory. Most importantly the idea that a scientific theory cannot be a literal copy of reality as it is in itself, a view which has lost its scientific credibility in modern science. James's views of science rule out the very possibility of deciding on empirical grounds that some theory is absolutely true or that different or successive scientific theories may converge some day to an ideal limit. James's commitment to empiricism far exceeds his commitment to absolute truth. On his account, to preserve the objectivity of truth, James must resort to an ideal limit, as he defined, it on the cost of abandoning his experientialism. In one way, this conflict can be resolved once he follows Duhem by honouring his commitment to empiricism; declaring that his adherence to absolute truth is a mere act of faith and not an act of reason.

8. SATISFACTION

James clearly states the principal difference between his view of truth and that of the anti-pragmatist, or the common-sense view, in the following.

> Where the pragmatist postulates a 'reality' for our ideas to be true of, the antipragmatists postulate a preexistent or absolute 'truth' for them to imitate. So far, it would seem that there is only a verbal difference. But the difference is really pragmatic. For the absolute truth must be univocally and literally copied by any belief that is true. Its fixity is of its essence. 'Reality' on the other hand, ever so fixed in itself, permits of an indefinite variety in our ways of knowing it truly. We make our contribution to the truth product and the same reality may be the object for many formulas, none false, and none irrelevant.[97]

The notion that our contributions bear on determining the truth-value of ideas is based on the claim that there are various ways by which we can know reality. This suggestion is based on an application of one of James's propositions about science; that the same phenomenon can be accounted for equally by more than one scientific formula and that the choice between them, provided it cannot be made on evidential grounds, becomes a matter of the maximum satisfactions that one formula may guarantee compared to its rivals. These 'satisfactions',[98] which can also be referred to as subjective factors, include simplicity, taste and consistency with previously held beliefs. The contributions of individuals to determining the 'truest' formula come in place in that sense. This notion is extended to truth, where James lays emphasis on the multiplicity of ways in which truth can be known. This requires the introduction of subjective elements such as satisfaction or satisfactoriness as co-determinants of the truth of beliefs. These satisfactions as applied to truth include good consequences and the fulfilment of desires. As we have seen earlier, for James,

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[97]James, MEN, 237-38.
[98]James, PRAG, 104.

"[t]he truth is constituted by its verifiability, not by the act of verification."[99] He introduces satisfaction as a criterion for determining the truth of ideas.

> *Satisfaction is indispensable, for truth, but it isn't sufficient.* Between the indispensable and the sufficient, there is a wide chasm. It is indispensable, for a belief to be true, that it should be satisfactory, but it isn't sufficient.[100]

The exact way in which James links the verifiability of beliefs with their satisfactoriness is not clearly demonstrated. The way this connection is established is crucial to understanding his use of satisfactoriness as a criterion in determining the truth of ideas. Let us now consider the different senses of satisfaction which are applicable to all kinds of beliefs. James writes:

> One can distinguish 3 ranges of satisfactoriness in our hypotheses:
> Intrinsic, as when they form a pretty picture, schemes, utopias, subjective reveries generally. language of flowers, their soul, etc
> Relational, as when they "agree" with all sorts of other hypotheses and beliefs.
> Subsequential, as when the consequences to ourselves of *believing* them are satisfactory. These subsequential satisfactions can be divided into two kinds. The first kind follows from our merely *having* the belief (religions, fool's paradises etc) the second from its "object" being a reality.[101]

The first type of satisfactoriness is relatively straightforward.

The second type of satisfactoriness represents a second meaning of the relation of agreement whereby a true belief is one which fits with other beliefs that the individual already accepts. This second type of satisfactoriness as agreement depends on the fundamental meaning of agreement as an affair of leading. These two meanings of agreement are added by James to the unsatisfactory form of agreement as copying. This second subordinate type of agreement and its relation to the other

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[99]James, ML, 442.
[100]James, ML, 442.
[101]James, MEN, 235.

meanings of the relation of agreement is clearly put in the following quotation from *Pragmatism:*

> And often agreement will only mean the negative fact that nothing contradictory from the quarter of that reality comes to interfere with the way in which our ideas guide us elsewhere. To copy a reality is, indeed, one very important way of agreeing with it, but it is far from being essential. The essential thing is the process of being guided. Any idea that helps us to *deal,* whether practically or intellectually, with either the reality or its belongings, that doesn't entangle our progress in frustrations, that *fits,* in fact, and adapts our life to the reality's whole setting, will agree sufficiently to meet the requirement. It will hold true of that reality.[102]

According to this second meaning of satisfactoriness, satisfactory beliefs are those which are protected from contradictions with later experience. What makes any true idea a satisfactory one, in this sense, is its consistency with previously accepted beliefs. This fitting is realised through the smooth and continuous transitions between experiences which go uninterrupted by contradictions and inconsistencies which future experiences may confront us with. When a contradiction arises in one's stock of beliefs one ought to revise his whole set of beliefs causing in this process the minimal possible changes in it. When a new belief of any kind is tested, it is tested in conjunction with one's previously held beliefs. For beliefs of any kind are not tested individually but holistically. If it is accepted as true, it is expected to have caused the least possible modification to one's originally held stock of beliefs. For in this matter of belief, James tells us, "we are all extreme conservatives."[103] James recognised, for example, that the belief in the Absolute might be satisfactory or useful in the sense of securing a kind of 'moral holiday'. He rejected it, nevertheless, on the grounds that it does not cohere with his stock of previously held beliefs. If one took satisfactoriness in an ordinary usage, and took James to be equating the true

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[102]James, PRAG, 102.

[103]This point is clearly stated in the following. "The individual has a stock of old opinions [or beliefs] already, but he meets a new experience that puts them to a strain. Somebody contradicts them; or in a reflective moment he discovers that they contradict each other; or he hears of facts with which they are incompatible . . . The result is an inward trouble to which his mind till then had been a stranger, and from which he seeks to escape by modifying his previous mass of opinions. He saves as much of it as he can." James, PRAG, 34-35.

with the useful, as some commentators did, then one must consider the belief in the Absolute as true for some people because it is useful in the above sense. In James's second sense of satisfactoriness, however, the belief in the Absolute is rejected as unsatisfactory because it clashes with James's previously held beliefs. James illustrates this point as follows:

> [T]he greatest enemy of any one of our truths may be the rest of our truths. Truths have once for all this desperate instinct of self-preservation and of desire to extinguish whatever contradicts them. My belief in the Absolute, based on the good it does me, must run the gauntlet of all my other beliefs. Grant that it may be true in giving me a moral holiday. Nevertheless, as I conceive it,—and let me speak now confidentially, as it were, and merely in my own private person,—it clashes with other truths of mine whose benefits I hate to give up on its account.[104]

Internal consistency of one's held beliefs, as one type of satisfactoriness, and indeed the chief among other satisfactions, is considered by James as a human contribution to the determination of the truth of any belief of whatever kind.

> Our nouns and adjectives are all humanized heirlooms, and the theories we build them into, the inner order and arrangement is wholly dictated by human considerations, intellectual consistency being one of them. Mathematics and logic themselves are fermenting with human rearrangements; physics, astronomy and biology follow massive cues of preference.[105]

Consistency is considered as a type of satisfaction because it assists us in handling the mass of beliefs that we hold by our "assimilating, rejecting, or rearranging"[106] of new and old beliefs when we are presented with new beliefs in the course of experience. In the course of this process the new idea or belief that we admit to our old stock as true must be one which cause a minimum disturbance to it and one that

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[104]James, PRAG, 43.
[105]James, PRAG, 122.
[106]James, MT, 42.

"mediates between the stock and the new experience and runs them into one another most felicitously and expediently."[107]

The individual's stock of beliefs includes active truths and latent truths. An active truth is one which is practically relevant to a certain situation and upon which the individual is prompted to act. A latent truth is one which is practically irrelevant to any present situation for the individual and in that sense the individual is unlikely to act on it. James refers to those temporary latent truths as 'extra truths' which are "ideas that shall be true of merely possible situations."[108] He writes:

> Whenever such an extra truth becomes practically relevant to one of our emergencies, it passes from cold-storage to do work in the world, and our belief in it grows active. You can say of it then either that 'it is useful because it is true' or that 'it is true because it is useful.' Both these phrases mean exactly the same thing, namely that here is an idea that gets fulfilled and can be verified. . . . True ideas would never have been singled out as such, would never have acquired a class-name, least of all a name suggesting value, unless they had been useful from the outset in this way.[109]

Thus, to be useful, a belief must be relevant to the believer's circumstance and that it can be acted on in a satisfactory manner.

> To be either *true* or *false* the idea must be *relevant.* Second the truth must be establisht [sic] by satisfactoriness in the working.[110]

James's use of 'utility' is founded on the notion of the total system of beliefs and the notion of relevance as just described.

In the third sort of satisfactoriness, that which James calls subsequential, he distinguishes, as mentioned above, between two types of consequences: those that

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[107]James, PRAG, 35.
[108]James, PRAG, 98.
[109]James, PRAG, 98.
[110]James, MEN, 238.

would follow from holding a belief and those that would follow from the existence of the object to which the idea is referring. In *Pragmatism,* James fails to make the distinction clear between these two different types of consequences, causing thereby considerable difficulties.[111] To attain a good grasp of how he uses consequences as a type of satisfactoriness in his account of truth, it is essential to examine his views on the meaning of ideas which he defines in terms of consequences and which is related to his account of truth, though he does not make this connection as explicit as it might have been. The tying of meaning with practical consequences is based on his view that thinking is one step in a process that terminates in action. Our ideas and thoughts are instruments that help us to act and fulfil our aims and purposes in life and to cope better with our experiences. In this lies the significance of thinking for James and to that extent he is interested in the meaning of ideas as connected with experience and human action. Here also, like truth, James's use of 'meaning' departs from the common usage, according to which the meaning of an idea is independent from the way it is applied.

9. PRAGMATIC METHOD

James made several remarks on meaning which he did not attempt to formulate in any consistent way. Hence, the commentator is confronted with the difficult task of constructing his view and that requires a good deal of interpretation. A brief discussion of his account of meaning prepares us for examining some of the

[111]A. O. Lovejoy was among those who raised this problem and expressed it in the clearest of terms. James acknowledges his failure to make this distinction clear in a letter to Lovejoy, dated September 13, 1907, in which he writes: '[W]hen it comes to your distinction between two meanings in the first meaning of pragmatism, I have to frankly cry *peccavi*—you convict me of real sin. Consequences of true ideas *per se,* and consequences of ideas *qua believed by us,* are logically different consequences, and the whole "will to believe" business has got to be re-edited with explicit uses made of the distinction. I have been careless here, and I hope that you, in your article, will spread out that matter at the length it deserves. Failure to do it on my part has been a misdemeanor.' Perry, II, 481.

significant interpretations of James's theory of truth and also helps in replying to some criticisms raised by his critics.

In the second lecture of *Pragmatism,* James argues that practical consequences determine the meaning of the ideas or concepts from which they follow.[112] He introduces the 'pragmatic method' as a tool that helps us in tracing the practical consequences of concepts in order to determine their meaning. Thus, the meanings of concepts, such as 'truth' and 'God' and other metaphysical concepts, are to be determined by the application of the pragmatic method which is designed to assist us in recognising the meanings of these concepts. James explains that:

> To attain perfect clearness in our thoughts of an object, then, we need only consider what conceivable effects of a practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, whether immediate or remote, is then for us the whole of our conception of the object, so far as that conception has positive significance at all.[113]

What James is suggesting is that if an idea does not possess any practical effects, then it lacks any meaning. He appeals to science to find support for this notion. Ostwald, who James describes as the 'illustrious Leipzig chemist', is one good example which James takes of someone utilising the pragmatic method and advocating a pragmatic view of meaning. James reports him as saying that:

> "All realities influence our practice . . . and that influence is their meaning for us. I am accustomed to put questions to my classes in this way: In what respects would the world be different if this alternative or that were true? If I can find nothing that would become different, then the alternative has no sense."[114]

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[112]James, PRAG, 28.
[113]James, PRAG, 29. James says that this principle of pragmatism was first introduced into philosophy by C. S. Peirce in 1878 in his paper 'How to Make Our Ideas Clear'. James, PRAG, 28.
[114]James, PRAG, 29.

James endorses Ostwald's words by remarking that "the rival views mean practically the same thing, and meaning, other than practical, there is for us none."[115] He quotes an example from Ostwald where the pragmatic method is at work.

> Chemists have long wrangled over the inner constitution of certain bodies called 'tautomerous.' Their properties seemed equally consistent with the notion that an instable hydrogen atom oscillates inside of them, or that they are instable mixtures of two bodies. Controversy raged; but never was decided. "It would never have begun," says Ostwald, "if the combatants had asked themselves what particular experimental fact could have been made different by one or the other view being correct. For it would then have appeared that no difference of fact could possibly ensue; and the quarrel was as unreal as if, theorizing in primitive times about the raising of dough by yeast, one party should have invoked a 'brownie,' while another insisted on an 'elf' as the true cause of the phenomenon.[116]

The basis of Ostwald's method is captured by James in his claim that in meaning

> [t]here can *be* no difference anywhere that doesn't *make* a difference elsewhere . . . The whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the true one.[117]

James is saying that whenever a debate arises over a certain philosophical problem which is expected to involve opposing positions, the dispute is likely to be futile unless the opposing views imply different practical consequences. This point is also emphasised in the following:

> The serious meaning of a concept, says Mr. Peirce, lies in the concrete difference to someone which its being true will make. . . . if it can make no practical difference whether a given statement be true or false, then the statement has no real meaning.[118]

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[115]James, PRAG, 29.
[116]James, PRAG, 29-30. Quoted from Ostwald's 'Theorie und Praxis', *Zeitsch. des Oesterreichischen Ingenieur u. Architecten-Vereines,* 1905, Nr. 4 u. 6.
[117]James, PRAG, 30.
[118]James, MT, 37.

And

> If, questioning whether a certain concept be true or false, you can think of absolutely nothing that would practically differ in the two cases, you may assume that the alternative is meaningless.[119]

There are two kinds of practical consequences which are logically independent of each other: those that follow from the object of which the idea is true and those that follow from someone's believing that that idea is true. In order to determine whether an idea is true or false, it must be meaningful. This requires both types of practical consequences. Thus, a proposition is meaningful iff there are practical consequences that follow from it and if holding that proposition by someone involves the expectation or prediction of those consequences which is reflected in the various number of experiences that they may lead to. Combining these two kinds of consequences as constitutive of the meaning of an idea is not put forward in this way by James, whose several statements about meaning were not very clear. The combination of objective consequences and subjective consequences parallels James's attempt to connect objective and subjective criteria as constitutive of truth.

10. SOME INTERPRETATIONS AND CRITICISMS

James's conception of practical consequences has been explained, pointing out his definition of a meaningful idea as one which is constituted by practical consequences both objective and subjective. Some of the formulations of James's view of meaning which have inspired certain interpretations of James's theory of truth will now be examined. In particular, the focus will be on A. J. Ayer's interpretation of James.

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[119]James, SPP, 60.

Near the end of this Part, there will be a formulation of James's theory of truth and indications of how it stands against other interpretations.

Because of James's varied references, such as the last two quotations and others, to two kinds of practical consequences, some commentators ascribed two distinct theories of meaning to James. A. O. Lovejoy distinguishes two different theories of meaning as propounded by James. On one theory, the meaning of any proposition consists entirely in the future experiential consequences to which it points, whether it is believed or not.[120] On the other theory, the meaning of any proposition is constituted by the future experiences that will only occur upon believing it, independent of whether the proposition itself allows the believer to predict the experiential consequences to which the proposition points.[121] Hence, if a proposition possessed consequences for the life of the believer, then it would be regarded as meaningful. It is not difficult to show, if James's account of meaning embodies these two criteria, that a proposition which is considered as meaningful according to one criterion may well turn out to be meaningless on the other. Construed in both its senses, James's theory of meaning, Lovejoy argues, is composed of two criteria of meaning which are inconsistent with each other. Take for example, the proposition 'There is an afterlife'. According to the first criterion of meaning, this proposition is meaningless since there are no empirical consequences that would succeed upon the presupposition that it is true. This proposition would be judged as meaningful on the second criterion if the belief in afterlife would have good consequences for the believer by bringing feelings of hope and emotional satisfaction.

To add to the incompatibility of the two criteria of meaning, Lovejoy shows that each one is unsatisfactory. The first criterion is obviously a narrow one which

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[120]Lovejoy, 'The Thirteen Pragmatisms. I.', 8, and 'The Thirteen Pragmatisms. II.', 37.
[121]Lovejoy, 'The Thirteen Pragmatisms. I.', 8, and 'The Thirteen Pragmatisms. II.', 37.

excludes a whole range of propositions which we usually regard as meaningful, and that makes it a 'highly paradoxical contention.' As for the second criterion, it is so broad and inclusive that it guarantees meaning to whatever proposition that a believer may wish to believe no matter how bizarre or unintelligible it might be.[122] If James did hold what Lovejoy is ascribing to him, then one cannot but admit the force of these criticisms which he is making.

This bifurcation of James's account of meaning into two incompatible criteria of meaning provided the foundation of some of the positivistic interpretations of James's theory. Paul Henle followed Lovejoy in distinguishing within James's account of meaning two criteria of meaning, highlighting the positivistic aspect of James's theory. Henle writes:

> A statement is meaningful if either (a) it has experiential consequences, or (b) it has no such consequences, but belief in it has experiential consequences. In case (a) the experiential consequences constitute the meaning. This is the tough-minded view. In case (b) there is no explanation of what constitutes the meaning and we are left with the bare criterion of meaningfulness. This is the tender-minded view.[123]

Henle is thus trying to reconcile the two incompatible criteria by holding that the first is what we may call the 'hard' one which is equivalent to the verifiability criterion of meaning. The second criterion is the 'soft' one which he characterises as a mere 'criterion of meaningfulness' which gives meaning to those propositions that lack any experiential consequences in themselves but which have consequences for the believers who hold them. However, there is no way of explaining the meaning of such propositions.

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[122]Lovejoy, 'The Thirteen Pragmatisms. I.', 9.
[123]Henle's introduction to William James in Fisch's *Classic American Philosophers,* 126.

In his discussion of the pragmatic method, A. J. Ayer argues that James's use of it goes far beyond his announced purpose of using it as a tool for "settling metaphysical disputes that otherwise might be interminable."[124] He does not embark on discussion of James's account of meaning on the grounds that he had already discussed "Peirce's rather more sophisticated version of it."[125] However, he remarks that this extended use of the pragmatic method can be traced in James's equation of true beliefs with those that work and his holding that different kinds of beliefs work in different ways.[126] Ayer holds that James's theory of meaning is linked with his theory of truth.[127] In fact, James's claim that true beliefs are those which work, follows from his application of the pragmatic method.[128] Unlike some commentators, Ayer does not focus on the apparent inconsistencies of James's statements on truth, he, rather, endeavours to reconstruct James's views to form "a consistent and even tenable theory."[129]

Ayer holds that James equates the true with what works. However, all beliefs, Ayer argues, do not work in the same way. The way beliefs work depends on the kind of beliefs they are. Thus, beliefs concerning matters of fact are true if they work in the sense that they describe sense experiences or predict experiences that they point to. However, moral, aesthetic and religious beliefs are true if holding them secures comfortable feelings or emotional satisfaction. The distinction between the different ways different beliefs may work renders James's view of truth consistent. Ayer insists that James is not to be accused of giving a confused account of truth, he just did not make it clear how the different kinds of beliefs work.

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[124]James, PRAG, 28.
[125]Ayer, *The Origins of Pragmatism*, 201.
[126]Ayer, *The Origins of Pragmatism,* 201.
[127]Ayer, *The Origins of Pragmatism*, 199.
[128]Ayer, *The Origins of Pragmatism*, 199.
[129]Ayer, *The Origins of Pragmatism,* 198.

Satisfaction as a criterion of truth, on Ayer's view, only applies to the third class of propositions, those of moral and religious ones. James's mistake was to offer it, as some of his critics accused him, "as a general criterion of truth." Ayer thinks that James only applied the criterion of satisfaction to beliefs of the third class.

The criterion of satisfaction which Ayer thinks that James only applied to moral and religious beliefs is not very different from Henle's tender-minded criterion of meaningfulness which leaves the question of meaning of such beliefs unanswered. Indeed, we are left with no indication of what the meaning of these beliefs consists in. We can simply believe what pleases us. For, it is one thing to argue that we do accept such beliefs on the basis of their being emotionally satisfying, it is another implausible claim to make the meaning of such beliefs lie exclusively in their satisfying personal needs. On both Henle's and Ayer's accounts, this problem persists and indeed is a major inadequacy in their formulations of James's theory of meaning and of truth, for it only leads to really weird results. For assuming that James did hold that the meaning of moral and religious beliefs consists wholly in their guaranteeing emotional satisfaction, then the belief 'there is an afterlife', for example, would have one meaning for the theist who firmly believes in afterlife and another for the atheist who shrinks from the dreadful notion of an afterlife. This shows that restricting the meaning of religious and moral beliefs to bare personal satisfaction is an implausible view and one to which James was never really committed. As shown earlier, the satisfaction that the believer gains as a result of holding a belief belongs to the third type of satisfactoriness which James applied to all beliefs. Later when the formulation of James's theory of truth is given, it will become clear how this type of satisfactoriness functions. Moreover, the view that James applies personal satisfaction to moral and religious beliefs only can hardly be supported by James's text. On Ayer's interpretation, the meaning of moral and

religious beliefs becomes so vague that it may be easily taken to be reduced to being meaningless.

My view is that, for James, the claim that a belief is meaningful iff it has practical consequences can apply to scientific, moral and religious beliefs. Henle's tough-minded criterion and Ayer's criterion, according to which the meaning of a belief consists in its future consequences, which he applies only to beliefs about matters of fact, are both applied, as I understand James, to all kinds of beliefs. The crucial point is to understand what James really meant by 'practical consequences'. It seems that he uses this term in a much broader sense than both Ayer and Henle do. Ayer restricts the consequences of beliefs to sense experiences. Taking into account James's statements quoted above, that beliefs which have no practical consequences lack meaning, one can see things from Ayer's point of view in his depriving moral and religious beliefs of any serious meaning, since no empirical experiences are to follow from them.

However, if one looks carefully at the way James uses 'practical consequences' and the way he applies the pragmatic method to various kinds of concepts, one will see that Ayer's interpretation is hardly tenable. Just as the pragmatic method was applied by some scientists to settle scientific quarrels, as has been shown in the example of Ostwald, pragmatic method is applied by James to settle metaphysical disputes by clarifying the meaning of the concepts involved. The extension of application of the pragmatic method from the realm of science to philosophy depends on James's broadening the concept of practical consequences so as not to include only sense experiences or empirically verifiable ones, but to include also metaphysical consequences. The motivation behind this move is to ascribe meaning to those concepts which lack empirical verifiable consequences and might otherwise be disqualified as meaningless.

An example might be helpful to show how this works. Consider James's discussion of materialism and theism. On Ayer's account of James, which limits meaning to beliefs which have empirically testable consequences and which applies satisfaction only to moral and religious beliefs, the proposition 'God exists' will be meaningless on Ayer's first criterion of meaning because it does not enable the theist to predict empirically verifiable consequences from it. Its only meaning consists in the personal satisfaction it gives to its holders.

On my view, which emphasises James's use of consequences in an inclusive rather than solely empirical sense, the meaning of 'God exists' is not wholly based on the personal satisfaction of holding the belief. It is also based on the future consequences that would follow from the proposition itself. The consequences we are talking about here are the moral ideals or standards and a life of hope and optimism that this proposition promises. That 'God exists' is a meaningful proposition is not primarily because it satisfies one to believe in it. It is primarily so because of the consequences that follow from the proposition itself. We are not claiming that James denies any role for personal satisfaction in determining the meaning of religious and metaphysical concepts. All we are emphasising is that this element plays a secondary role as a determining factor of meaning. Hence, we can say, as we have said earlier, that the meaning of moral and religious beliefs is determined by both the consequences that follow from the belief and the consequences for the believer from believing them. These cannot be split into two distinct criteria as some commentators thought. On Ayer's account, the proposition 'God exists' is denied any objectiveness and seemed to have been located in the realm of total subjectiveness and even meaninglessness, since Ayer does not tell us what the meaning of this proposition does consist in.

Similarly, the meaning of materialism is determined by the future consequences that it predicts, those of pessimism and destruction of moral values. Its meaning is not determined by sheer personal satisfaction which the believer in materialism might have upon believing it. In this sense, both theism and materialism are pragmatically meaningful. If consequences were restricted to empirical ones, the debate between theism and materialism would be meaningless. For the empirical consequences, so at least James seems at times to suppose, are the same on either view and in this sense the two positions are equal. The real difference that distinguishes one from the other is the consequences (non-empirical) that each promises. One can then choose objectively between them according to what satisfies one. Hence, the meaning of moral and religious beliefs does not consist merely in the personal satisfaction which the believer gains upon holding them, as Ayer and Henle thought.

That the meaningfulness of a moral or religious belief does not consist only in the consequences that follow from believing it but also in the consequences that follow from it is also shown in James's view of the Absolute. Regarding the meaningfulness of the proposition 'The Absolute exists', James contends that:

> Affirming the Absolute Mind, which is its substitute for God, to be the rational presupposition of all particulars of fact, whatever they may be, it remains supremely indifferent to what the particular facts in our world actually are. Be they what they may, the Absolute will father them. . . . You cannot redescend into the world of particulars by the Absolute's aid, or deduce any necessary consequences of detail important for your life from your idea of his nature.[130]

What James seems to be saying here is that there are no consequences that would follow from the existence of the Absolute and the only pragmatic meaning that can be ascribed to the proposition 'The Absolute exists' consists in the religious comfort that the belief in the Absolute brings to its believers. This quotation may be taken as

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[130]James, PRAG, 40.

showing James's denial to that proposition of any consequences that might follow from it. However, this is by no means the case. For what he is pointing out in the discussion of the pragmatic meaning of the Absolute, is that the meaning of this proposition is not determined wholly by the consequences of believing it. James shows that there are consequences that follow from the proposition itself which are partly constitutive of its meaning. For even if there were no specific experiential consequences to be deduced from it, it can still be the case that the proposition itself predicts that good will eventually win over evil, if it proves to be true. Expectations as such constitute the consequences that would follow from the proposition. Thus, the meaning of the Absolute consists in both the consequences that are anticipated from postulating its existence and the consequences that follow from believing it. To conclude this discussion of the meaning of moral and religious beliefs, an attempt has been made to show that James held that the meaning of these beliefs is determined by both the consequences that follows from the beliefs themselves and the consequences that follow from believing them, such as the feelings of comfort and personal satisfaction. In fact, James held one criterion of meaning which is comprised of two distinct and logically independent notions which he applied to all kinds of propositions.

The interpretations of James's theory of meaning by Ayer and Henle when applied to truth, deny any contribution of our interests to the determination of the truth of all propositions and restrict it to moral, aesthetic and religious propositions. The aim of such interpretations is to save James from the charge of subjectivism of which many of his critics accused him. This reading, however, deprives James's theory of truth of its most significant aspects, which he intended to apply to all kinds of propositions, and leaves him with nothing new to offer.

Another misguided reading of James's theory of truth is the one offered by H. S. Thayer. Thayer distinguishes in James's theory between 'cognitive' and 'pragmatic' truth holding that what James was offering is an analysis of pragmatic truth. He defines a pragmatically true idea as one which satisfies three conditions. It must:

1. Be cognitively true.
2. Be compatible with the older body of truths.
3. Work. It must provide some satisfaction of a need or purpose.[131]

Here several points can be made. Nowhere in James, one can find the distinction between cognitive truth and pragmatic truth. On James's account, as we have shown earlier, the copy version of the correspondence theory has been replaced, or reduced, to the pragmatic theory of truth. This goes against Thayer's claim that pragmatic truth is based on cognitive truth. What follows from this is that an idea cannot be pragmatically true unless it was cognitively true. This goes against what James has been arguing for all along. The notion of truth in terms of agreement, according to James, has been replaced by the notion of working. In this sense, if one is to decide the relation between pragmatic and cognitive truth, cognitive truth, on James's account, becomes based on pragmatic truth. Thayer's account which regards cognitive truth as an essential component of pragmatic truth seems to ignore James's many statements in which he emphasised the emptiness and unintelligibility of the notion of cognitive truth and the urgent need to replace it with an empirical notion of truth that works for all kinds of ideas. If James intended his pragmatic view of truth to be based on cognitive truth which he already charges with vagueness and unintelligibility, then one would not expect his account of truth to be any less vague and sterile. Thayer's account seems to represent James's theory of truth as an addition to the intellectualist account of truth and not as a replacement to an account which James challenged and subsequently rejected. The second and third conditions

[131]Thayer, Introduction to MT, xxxvii.

of pragmatic truth, as Thayer put them, are not additional conditions to the first condition, i.e., cognitive truth, they are rather co-determinants of cognitive truth.

G. E. Moore's[132] account of James's theory of truth lacks any recognition of the way James connects verifiability and satisfactoriness in its different types as two conditions of truth. According to Moore, James's only objection to the copy theory of truth is that 'copying' is not a property of all true ideas, since some of our true ideas do not actually copy reality.[133] However, Moore held that verification and utility are the properties which James thought to have belonged to all true ideas. 'Our true ideas, he [James] seems to say, are those that "work," in the sense that they are or can be "verified," or are "useful."'[134] Consequently, James sought to establish some connection between truth and verification or utility by asserting that:

(1) we can verify all those of our ideas, which are true;

(2) that all those among our ideas, which we can verify, are true;

(3) that all our true ideas are useful and

(4) that all those of our ideas, which are useful, are true.

Moore had no serious objection to (2) but he had serious objections to (3) and (4) the basis of which were that all true ideas are not at all times useful and that we do at times have useful ideas which are not true. For instance, one counter-example which Moore gives against (4) is that of someone lying to a "party of savages, who wish to make a night attack and massacre a party of Europeans but are deceived as to the position in which the Europeans are encamped. It is surely plain that such a false idea is sometimes useful".[135]

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[132]As a keen defender of the common-sense viewpoint, Moore was hostile to any other view of truth which he believed to depart from or to conflict with common sense. According to him, a belief is true, if and only if it corresponded to a fact. An analysis of this relation of 'correspondence', Moore admits, cannot be easily given. However, it is the kind of relation that holds between any belief and one fact only, where both sides of the relation are explicated by the use of sentential expressions according to which, a belief is described as 'the belief that p' and the fact as 'the fact that p'. Moore, *Some Main Problems of Philosophy*, 277-78. See also Sprigge, *James & Bradley*, 16.

[133]Moore, *Philosophical Studies,* 98.

[134]Moore, *Philosophical Studies,* 97.

[135]Moore, *Philosophical Studies,* 113.

From our discussion of the different ranges of satisfactoriness which James had distinguished within our beliefs and hypotheses, it can be certain that Moore is using 'utility' in its usual and ordinary usage. For James, as has been seen, satisfactoriness in its different types is a co-determinant of the truth-value of beliefs. Thus, only consequences which are relevant to the belief are taken into account in determining the truth-value of beliefs. To consider Moore's example just mentioned, the savages' belief about the position of the Europeans is, according to Moore, false because they were deceived as to the correct position of their enemies. Here we have a false belief held by the savages which was useful for the Europeans. When we talk about truth, for James, we talk about truth for the individual and the determination of the truth-value of any belief is based on the consequences that follow from that belief for the believer. Hence, although the savages' belief about the position of the Europeans is false because the Europeans succeeded in deceiving them about their position, the fact that they were located elsewhere does not follow from the savages' belief about the position of the Europeans. Thus, the fact that the Europeans have changed their location is irrelevant to the determining of the truth-value of the savages' belief in the correct position of the Europeans. Any consequences that follow from that are irrelevant to the savages' belief. Moore seems to be holding that any consequences contribute to determining the truth-value of any belief. The fact that the savages were deceived could not have ever been predicted by the savages' belief in the position of the Europeans. Such consequences are irrelevant to the belief's truth-value. Since James regards satisfactoriness as partly constitutive of the meaning of beliefs, consequences that are external to the belief cannot be considered as constitutive of its meaning. Moore's other example about the man who misses the train because of a false belief about the accuracy of his watch can be dealt with in a similar way.

James's distinction on the one hand, between pragmatic truth, truth for the individual as the starting point of his theory of truth, and ideal truth on the other, has given rise to various criticisms, especially from philosophers like F. H. Bradley who were committed to a version of idealistic metaphysics. Let us consider very briefly his general view of truth. Bradley held, at one stage, a coherence view of truth which fits neatly with his metaphysics. Truth, in his view, is identified with an individual, all-inclusive and appropriately connected systematic coherent whole. Members of this system are mental items to which he refers as judgements. Every judgement is subject to the test of whether or not it fits within a complete system of those beliefs which have already been accepted. Bradley characterises this test as follows.

> The test which I advocate is the idea of a whole of knowledge as wide and as consistent as may be. In speaking of system I mean always the union of these two aspects, and this is the sense and the only sense in which I am defending coherence.[136]

Bradley is not merely concerned with the coherence between beliefs, but also with their comprehensiveness. The true set of beliefs, he argued, must include both maximum coherence and maximum comprehensiveness. These two characters are not two irreducible principles but two complementary aspects of a single principle.[137] Bradley thinks that reality is both coherent and comprehensive. Thus the degree to which our theories can become closer to identity with reality depends largely on their degree of coherence and comprehensiveness. However, this type of truth, truth for ordinary purposes, should not aspire to a correspondence with reality, it can only establish systems of beliefs which are for various tasks more or less pragmatically useful. The kind of truth which seems to be appropriate for this correspondence or identity is absolute truth which aims at grasping the real essence

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[136]Bradley, *Essays on Truth and Reality,* 202.
[137]Bradley, *Essays on Truth and Reality*, 223.

of reality and which comes nearer to a correspondence with reality in its ultimate nature.

Thus, we see Bradley attacking, on the level of ordinary judgements, 'the copy theory of truth' in any of its forms because "[t]o copy is to reproduce in some other existence more or less of the character of an object which is before your mind."[138] This theory assumes that reality is independent of knowledge and of truth. However, "[t]he moment that truth, knowledge, and reality are taken as separate," Bradley argues, "there is no way in which consistently they can come or be forced together".[139] By taking truth to consist in copying fact, reality is made external to thought and it is difficult to see how they can be connected again. Another objection which Bradley raises is that if truth is taken to copy fact then,

> the facts to be copied show already in their nature the work of truth-making. The merely given facts are, in other words, the imaginary creatures of false theory. They are manufactured by a mind which abstracts one aspect of the concrete known whole, and sets this abstracted aspect out by itself as a real thing.[140]

Thus, in Bradley's view, we never experience reality in an uninterpreted form. Considering that the knower is a transformer of experience, it can hardly be maintained that what is really experienced are the facts as they are in themselves. Bradley solved this difficulty of the separation between reality and thought by the identification of truth, knowledge and reality.

This brief examination of the main features of Bradley's views on truth helps us in discussing some of his main criticisms of the pragmatic theory of truth. Bradley was not entirely certain what the pragmatic theory of truth was actually affirming.[141] He

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[138]Bradley, 'On Some Aspects of Truth', 331-32.
[139]Bradley, *Essays on Truth and Reality*, 110.
[140]Bradley, *Essays on Truth and Reality*, 108.
[141]Bradley, *Essays on Truth and Reality*, 127.

argued that if truth is regarded merely as a matter of the practical success of ideas, then one must be clear on what is precisely meant by 'practical success' if one is to have a grasp of what truth means pragmatically. If the practical success of ideas was established very broadly, then what this theory is claiming seems to be trivially true and barely revolutionary. The successful working of ideas could be the result of the correspondence between ideas and facts. If success is understood narrowly, then the theory does not seem to be correct, for an idea could be false, but remain useful. Two points can be made here. Bradley seems to be taking utility or satisfactoriness in its ordinary usage as the only condition for determining the truth of ideas pragmatically, and an attempt has been made to show that this is incorrect. The satisfactions in their various kinds, practical or intellectual, do not constitute the meaning or essence of truth. In MT, James emphasises the point that for him the 'true' is not defined in terms of satisfactory results.

> Good consequences are not proposed by us merely as a sure sign, mark, or criterion, by which truth's presence is habitually ascertained, tho they may indeed serve on occasion as such a sign; they are proposed rather as the lurking *motive* inside of every truth-claim, whether the 'trower' be conscious of such motive, or whether he obey it blindly. They are proposed as the *causa existendi* of our beliefs, not as their logical cue or premise, and still less as their objective deliverance or content.[142]

In addition, this criticism seems to be based on the assumption that the only success that ideas might have is the practical, which is not true for James. James talks most of the time about ideas helping us in the practical dealings with realities, but he did not hold that this is the only kind of dealing that true ideas may help us in. Of the different kinds of realities, he was more interested in talking about empirical realities and the way true ideas help us in our practical dealings with them. Writing to Perry on August 4, 1907, James points out

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[142]James, MT, 146-47.

> how unlucky a word pragmatism has been to attach to our theory of truth. It seems to most people to *exclude* intellectual relations and interests, but all it *means* is to say that these are subjective interests like all the others, and not the sole ones concerned in determining the beliefs that count as true. . . . You . . . use [the word "practical"] as *excluding* intellectual practice. The pragmatic test of a concept's meaning is a difference in possible *experience* somewhere, but the experience may be a pure observation with no "practical" use whatever. It may have the tremendous theoretical use of telling which concept is true, however; and that may remotely be connected with practical uses over and above the mere verification, or it may not.[143]

Hence, for James, ideas are not true only in virtue of their practical success. But Bradley seems to think that the practical success is the only form of working that James is using.

"[W]herever the word truth has its meaning," Bradley says, "that meaning to me cannot be reduced to bare practical effect".[144] He admits that the successful working of ideas can be regarded as a criterion for determining their truth. At some unreflective stage, the mind only accepts ideas which work practically. But even if these practical workings are the closest we can get to truth, one cannot allow that the essence of truth lies totally in such working ideas. Thus he says, "I agree that any idea which in any way 'works', has in some sense truth. Only to my mind it has not on this account ultimate truth".[145]

Bradley can hardly be right in thinking that the only type of truth that James held is pragmatic truth. He distinguished, as we have discussed earlier, between pragmatic truth and absolute or ultimate truth, which he characterised in a completely different way from Bradley. James is concerned with truths for the individual which he holds at a given time and which help him in choosing which beliefs to accept in the course of his experience. For James, pragmatic truth does not aim at revealing the deep

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[143]Perry, II, 475.
[144]Bradley, 'On Truth and Practice', 311.
[145]Bradley, *Essays on Truth and Reality,* 123.

nature of reality, it is designed to help the individual in dealing with reality in a way that satisfies his interests and needs. Hence, we find that the individual's interests and aims have their contributions to truth. This does not mean that the postulation of an objective type of truth is not legitimate. If ultimate truth is to be postulated, it can function no more than "a purely abstract ideal that it only serves as a vanishing point."[146]

But even when James postulated absolute truth, in one of his characterisations of it, it was based on the subjective experiences of the individuals. Thus, subjective experiences provide the foundation of absolute truth not the other way around. A notion of absolute truth that is detached from the individual or human context is one to which James can hardly subscribe.

> The *thinness* of the notion of absolute truth, in philosophy, used without all this other practical interest, is, to me, very surprising. Idealists make the pretension that their notion of absolute reality, of absolute truth, puts them in a far better position, somehow, than the outsider. But the extraordinary *thinness of the results* is astonishing. 'The truth is that, to deny which is absurd, to deny which is self-contradictory. The truth is that which you have to affirm in order to deny.' Golly! If we only had a truth like that![147]

It can be said that Bradley's commitment to absolute truth parallels James's commitment to pragmatic truth.[148]

Both Bradley and Royce believed in the existence of the Absolute which James often described as the 'moral holiday' giver. For the Absolute as an explanatory hypothesis of the way our ideas refer to or know their objects, James substituted the 'chain of intermediaries' as an alternative hypothesis which provides the bridge between ideas and objects, as has been pointed out earlier. James describes his

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[146]James, ML, 434.
[147]James, ML, 436.
[148]In this brief discussion of Bradley's views on truth, I benefited mostly from Sprigge's discussion of Bradley in his *James & Bradley.*

position as an equal alternative to the absolute idealist's on the grounds that both accounts provide 'hypothetical conditions' to explain the way ideas know their objects.

> I the pragmatist does just the same substituting the term "chain of intermediaries" for "Absolute." *If* there is to be knowledge the chain must be there, and its being there will suffice. There must be, shall be, *is* knowledge, we say, so we *suppose* the chain, as R. [Royce] supposes the absolute.
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> We posit our condition in both cases. . . . Whose particular knowledge *is* true, the definition doesn't say. And my doubt whether the Absolute be there can pair off with Royce's doubt whether the chain of intermediaries are there. Either, *if* there, will do the trick.[149]

Despite the criticisms with which Royce confronted James, James's reply to him was by declaring that both his and Royce's conditions of knowledge are mere hypotheses which may equally account for the same question, and thus, neither can be legitimately discarded as false. This is a clear example of James's commitment to the view which he emphasised with regard to science, that the same phenomenon cannot be accounted for by one single and uniquely true hypothesis. In cases where we cannot decide which view to accept on empirical or evidential grounds, we are justified in deciding the matter on subjective grounds. From James's viewpoint, the series of intermediary experiences must exist, if an idea is to know its object. In Royce's view, the Absolute must exist in order to guarantee that an idea reaches its reality. However, for James the belief in the Absolute, as shown earlier, conflicts with his other beliefs which he is not willing to give up and so he had to reject it despite its securing a 'moral holiday.' For, the degree of satisfaction which the Absolute guarantees is less important than the satisfaction of consistency which James regards as the chief kind of satisfaction.[150]

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[149]James, MEN, 239-40.
[150]James, ML, 436.

Some commentators such as Sprigge and Thayer emphasised the fact that James's empirical account of the way our ideas know their objects was largely motivated by Royce's challenging proof of the existence of the Absolute or God.[151] This story is told by Sprigge as follows. In his *The Religious Aspect of Philosophy,* Royce argues that the admission of the undeniable existence of error implies the necessary existence of an absolute mind which includes everything. An error, Royce tells us, is

> an incomplete thought, that to a higher thought, which includes it and its intended object, is known as having failed in the purpose that it more or less clearly had, and that is fully realized in this higher thought. And without such higher inclusive thought, an assertion has no external object, and is no error.[152]

Thus the possibility of error depends on a false thought being contained in a more inclusive thought which is contained in the absolute mind of which our finite minds are only fragments. On this account, my idea encounters the object of which it is about directly. The relation between thought and its object becomes a "distinctively mental type of directedness on the Absolute's part"[153] which should make the reference to our ideas intelligible.

Sprigge tells us that James took Royce's argument very seriously and tended to think that Royce had proved the existence of the Absolute. However, James was struggling to find an alternative and empirical account of the relation between a thought and its object which would explain how errors arise and would escape the postulation of an absolute mind. Thus, Sprigge argues that for James, an idea can have a definite meaning and reference iff it is sufficiently helpful in preparing us for encounters with some object that it is about. The meaning and reference of any idea are determined by the conditions which must be satisfied if the idea is to encourage the

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[151]Sprigge, *James & Bradley,* 135.
[152]Royce, *The Religious Aspect of Philosophy*, 425.
[153]Sprigge, 'James, Aboutness, and his British Critics', 134.

successful behaviour and to promote fruitful dealings with reality.[154] The truth of thought does not consist in a certain relation of correspondence or some form of copying between the thought and an object which exists independently of it, it rather consists in the fact that the thought is more likely to put one into behavioural relations with its object which are satisfactory and useful.[155] As for the case of error, Sprigge explains,

> an idea will be false if there is no such object as it is fitted to put us into satisfactory relations with, either because there is no such object to be engaged with in a manner prompted by the idea, or because such object as there is lacks essential features required if that engagement with it is to be successful.[156]

According to Sprigge, James has given an empirical account of how to account for error without postulating an absolute mind. A true idea is one which is expedient in the sense of securing fruitful relations with its object and thus its expediency depends on its object actually existing.

Sprigge's account of James's views on truth is a realist one. It is intended to show that within the realist universe of discourse, James's position can still be shown to be tenable. Hence, Moore's criticisms, some of which we have briefly examined, of the equation of the true with the expedient could be met and shown to satisfy the following requirement: Someone's belief that p is true iff p, where p is a proposition.

Sprigge starts by quoting one of the best-known passages of James on truth which, he tells us, have shocked many philosophers, especially if taken out of context. In the sixth lecture of *Pragmatism,* James writes:

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[154]Sprigge, *James & Bradley*, 59.
[155]Sprigge, 'James, Aboutness, and his British Critics', 136.
[156]Sprigge, 'James, Aboutness, and his British Critics', 136.

> *'The true,' to put it very briefly, is only the expedient in the way of our thinking, just as 'the right' is only the expedient in the way of our behaving.* Expedient in almost any fashion; and expedient in the long run and on the whole of course; for what meets expediently all the experience in sight won't necessarily meet all farther experiences equally satisfactorily. Experience, as we know, has ways of *boiling over,* and making us correct our present formulas.[157]

This passage follows a long discussion by James of truth as agreement pragmatically defined and its first summatory sentence is intended to highlight a connection between truth and utility which other accounts of truth, such as the intellectualist's, whose position James took as a foil to his own, do not make. Hilary Putnam gives a telling characterisation which is representative of the attitude of some critics regarding the above passage.

> Critics typically cite only the first sentence. Such readers attend only to the idea that "expedience" is what determines truth, although most of this lecture (*P,* lecture 6) is devoted to "agreement" with realities. Thus, Russell quotes James as follows: "The 'true' is only expedient in the way of our thinking. . . . in the long run and on the whole of course." Russell omits "to put it very briefly" and "in almost any fashion" – indications that what we have is a thematic statement, and not an attempt to formulate a definition of "true" – and also substitutes his own notion of what "expediency" is for James's, and ends up saying that James proposed the theory that "true" means "has good effects."[158]

There cannot but be full agreement with Putnam on this point. As said earlier, satisfactoriness is a necessary but not sufficient condition of truth. Hence, the equation of the true with the expedient does not hold. Truth cannot be defined in terms of expediency. What does support the view that expediency is not the only condition of truth and is specified as we have argued, is the following important passage, which was cited earlier.

> The social proposition 'other men exist' and the pragmatist proposition 'it is expedient to believe that other men exist' come from different universes of discourse. One can believe the second without being logically compelled to

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[157]James, PRAG, 106.
[158]Putnam, 'James's Theory of Truth', 180.

> believe the first; one can believe the first without having ever heard of the second; or one can believe them both. The first expresses the object of a belief, the second tells of one condition of the belief's power to maintain itself. There is no identity of any kind, save the term 'other men' which they contain in common, in the two propositions; and to treat them as mutually substitutable, or to insist that *we* shall do so, is to give up dealing with realities altogether.[159]

Several points can be made here. If James is really defining truth in terms of expediency by holding that the true is the expedient, then he must hold that 'it is expedient to believe that p' is equivalent to saying that 'it is true that p', but he obviously does not. Also, in order for James to be committed to defining truth in terms of expediency or satisfactoriness, the latter should be a necessary and sufficient condition for truth, and as we have tried to show, James holds that it is a necessary but not a sufficient condition. The reason why James characterised this condition in these terms is the following. For him, verifiability is the necessary and sufficient condition for truth. The true is the verifiable. But, only beliefs which are verifiable could be satisfactory for the believer. Any belief which is unverifiable will not help its holder to deal satisfactorily with reality. It might be a satisfactory belief in some sense, but it will not help one to act on it and cope with reality in an adequate way. The result, if the believer held a satisfactory belief which is unverifiable, is that the consequences that are expected to follow from the belief will not occur and the believer's hopes that the required consequences would follow will end in frustration. Thus we can say that for James, verifiability is a sufficient condition for satisfactoriness. Satisfactoriness is dependent upon verifiability.

Another important point is that taking into consideration James's account of meaning, he cannot admit to equating the proposition 'other men exist' and 'it is expedient to believe that other men exist'. The equation of the two would confuse a distinction between the consequences that follow from a proposition and those that

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[159]James, MT, 150.

would follow from believing it. The meaning of the proposition 'other men exist' consists only in the consequences that follow from it. While the meaning of 'it is expedient to believe that other men exist' consists of the consequences that follow from other men existing and the consequences that would follow from believing it. Hence, the proposition that 'other men exist' and 'it is expedient to believe that other men exist' cannot be equivalent.

So, for truth, as it is in the case of meaning, there are two conditions that determine the truth of any belief: an objective condition concerning verifiability and a subjective condition concerning satisfactoriness. The objective condition is the primary one and the subjective is dependent upon the objective. Thus, the determination of the truth-value of any given belief involves the application of these two conditions thus characterised. As seen earlier, when we discussed James's view of meaning, on similar grounds, the meaning of a belief is determined by both the objective consequences that follow from the belief itself and the subjective consequences for the believer upon holding the belief.

Let us go back to the quotation *"'The true,' to put it very briefly, is only the expedient . . ."* and examine Sprigge's account of it. Sprigge, like Moore and Russell and other commentators, takes this quotation as representative of James's account of truth. Hence, he takes James as equating the true with the expedient. Sprigge considers satisfactoriness as the only condition of truth which we can say that he takes to be both necessary and sufficient. He begins by introducing what he calls the T pattern, It is true that p iff p, where p is a proposition. This pattern, he says, must be satisfied by "any account of truth worth taking seriously."[160]

[160]Sprigge, *James & Bradley*, 11.

He then points out that when equating 'the true' with 'the expedient', the T pattern cannot hold true of all its instances, or so at least it would seem. He gives the example of the proposition that there is an afterlife. When 'the true' is equated with 'the expedient', we end up with something like: It is expedient (meaning true) to believe that there is an afterlife even when there is no afterlife. So one can find many examples where the T pattern is violated once the equation of 'the true' and 'the expedient' is made. Hence, Sprigge undertakes to show how, when a certain interpretation of some of the ideas involved in James's theory of truth is given, the identification of truth with expediency satisfies the T pattern.

Since for James the truth-bearers are mental items such as beliefs and ideas, Sprigge modifies the T pattern to the following:

Someone's belief that p is true if and only if p.

What must now be provided is an account of the conditions under which this pattern can be satisfied.

According to Sprigge, such an account of truth which regards 'the true' and 'the expedient' as equivalent would be particularly vulnerable to the following criticisms which were initially raised by Moore and Russell. For on James's account, they argued, "a belief that something exists may be true even though it does not." A belief can be true because it is useful implies that it can be true that x exists even though it does not exist.[161] Thus, Moore says that if he had an idea that Professor James exists and the latter has some thoughts which were useful, then on James's account, Moore's idea "would be true, *even if* no such person as Professor James ever did exist."[162]

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[161]Sprigge, 'James, Aboutness, and his British Critics', 129.
[162]Moore, *Philosophical Studies,* 127.

From a realist point of view, if one would avoid such an outcome while holding to the equation of the 'true' and the 'expedient', an explanation must be given that would emphasise the existence of the object of the belief so that it can consistently be held both that the object of the belief exists and that the belief in it is useful. The way that this relation can consistently be established depends on how one can explain the role that satisfactoriness plays in the following:

Someone's belief that p is true if and only if it is useful if and only if p exists.

According to some version of a realist conception of truth, a belief is true if and only if its object exists. The object to which it corresponds may be a fact that exists or an object. The problem arises when 'useful' features in the above formula as a necessary and sufficient condition for the truth of the belief and for the existence of its object. For on a realist conception of truth and utility, all sorts of counter-examples can be invented that would make this formula collapse.

Sprigge argues that an explanation of the role of utility, in its ordinary usage, can be offered in light of James's account of the way ideas refer to their objects, which he offered as an alternative to Royce's. According to James, as has been shown earlier, ideas are connected to their objects by a chain of intermediary experiences that lead from the ideas to the objects they refer to. These connections, if Sprigge is correctly understood, could be either satisfactory or unsatisfactory, depending on whether the idea leads towards (or into the universe of) its object successfully or not. If a true idea leads one to successful relations with its object, then that idea is useful because it secures good relations with its object; if it did not prompt successful encounters with its object then the idea is false and not useful. Here the very notion of an idea successfully leading to its object depends on the object's actually existing. Hence, we cannot have useful ideas of objects that do not exist because the usefulness of the

idea depends on its actually leading successfully to its object. The idea that successfully leads to its object is one which is both true and useful.

A few points can be made here. Sprigge starts by taking the condition of satisfactoriness as a necessary and sufficient condition of truth, thus he takes James as equating 'the true' and 'the expedient'. However, he later seems to be using satisfactoriness as a necessary but not sufficient and as dependent on verifiability. For the successful dealings with reality that a true idea may secure depend on the idea's actual leading to its reality. This can only be achieved through a chain of intermediary experiences. This function of agreeable leading is what James means by the idea's verification. In addition, the kind of satisfactoriness that Sprigge takes as equivalent to truth is only one type of satisfactoriness, that is the second kind of the third type of satisfactoriness, which we find in our beliefs and hypotheses, according to James. Sprigge seems to be considering this as the maximum satisfaction that might obtain, that is when the object of the belief actually exists. However, for James, the maximum satisfaction, as emphasised, results from the belief being consistent with other beliefs which constitute one's stock of beliefs.

Sprigge seems to be taking the proposition, to use James's example, that 'other men exist' as equivalent to 'it is expedient to believe that other men exist'. We have shown earlier that if these two propositions were taken as equivalent, then according to James's theory of meaning, the consequences that would follow from either proposition would not be different. The equation between these two propositions would mean that they mean the same thing and thus both have the same consequences. This leads to a contradiction because there is a distinction between the consequences that would follow from a proposition and those that would follow from believing it, as James's remarks concerning the third type of satisfactoriness seem to indicate.

Sprigge regards James's theory of truth incomplete. He agrees with James that an idea may be true in a pragmatic sense whereby it guides us to behaviour towards its object. However, Sprigge argues that we do in fact possess ideas which are true in a non-pragmatic sense.[163] He seems to be taking James as committed only to pragmatic truth and either as denying the existence of absolute truth or giving it an insignificant role in his account of truth. Bradley, as we have seen already, did raise a similar objection to James's pragmatic truth. It has been shown that James distinguished between these two types of truths, though he was mainly interested in pragmatic truth and characterised absolute truth differently from Bradley and Sprigge.[164]

11. CONCLUSION TO PART TWO

This examination of James's theory of truth shows how complex and unusual his views were. An attempt has been made to show how certain propositions of science to which James was committed had influenced the formulation of his views on truth. Truth in science, as has been seen in Part One, is established on both evidential and non-evidential grounds. In the case of scientific hypotheses, subjective qualities, such as simplicity, are only applied to verifiable hypotheses. Also for scientific theories or fomulae, the role of subjective factors is limited to that of choice between equally well-evidenced theories. Hence, the application of subjective qualities is dependent on the objective evidence for the truth of scientific theories already having been established.

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[163]Sprigge, *James & Bradley,* 64.
[164]See the exchange between Bird and Sprigge in *Bradley Studies* which seems helpful in clarifying some aspects of Sprigge's account of James, especially on the use of the distinction between cognitive and non-cognitive beliefs in discussing James.

The structure of his project in science parallels that of his theory of truth, where the truth of any idea of any kind whatsoever is determined by subjective and objective conditions. The position that emerges is one which is pragmatist rather than realist. Discussion has focussed on how objective and subjective conditions operate according to James's view of truth. Verifiability is a necessary and sufficient condition for truth. Satisfactoriness is a necessary but not sufficient condition for truth. The condition of satisfactoriness is constrained by the condition of verifiability which guarantees some degree of objectivity to true ideas. A verifiable idea is always one which is true and whenever an idea is verified, it is true. However, an idea can be satisfactory but false. The view that James was a careless subjectivist is not one that can reasonably be sustained.

The application of the pragmatic theory of truth to religious belief indicates how these objective and subjective aspects of James's account of truth work as determinants of the truth of religious claims. James's account of religion is the topic of the next part of the thesis.

PART THREE: RELIGION

1. INTRODUCTION

In *Pragmatism* (lecture I), James argues that the request for empirical justification of beliefs had resulted in what he called 'the present dilemma of philosophy'. On one hand, there were philosophers, especially those of scientific orientation, who demanded that only beliefs which can be justified empirically could be accepted. Thus, those committed to this view, of whom there were many, felt themselves forced to reject religious claims as lacking any empirical justification. On the other hand, there was a group of philosophers, prominent among whom were Absolute idealists, who adopted certain religious views which seemed to James empirically vacuous, wholly abstract and of minimal relevance to the believer's religious life. James saw the dilemma in religion in the context of these two very different positions of scientific philosopher and speculative philosopher.

The search for intellectual evidence for religious beliefs by the second group of philosophers is marked by consideration of religious questions as theoretical questions that could be solved conclusively by arguments. As for individual believers, James observed that they do not hold their beliefs on the basis of conclusive arguments. People without religious sentiment are not inclined to accept the religious point of view and are unlikely to hold firm to religious beliefs on the basis of argument. James also noticed that it is rarely probable that believers would abandon their religious beliefs on the basis of arguments no matter how conclusive that might seem to tie it down to the empirical. The point that James is highlighting is that in many cases, if not most, religious beliefs held by individuals are not held entirely on the basis of rational or supposedly conclusive argument. Hence, if we are to look for justification for religious beliefs, perhaps we should not be focussing wholly on rational evidence. We must look for justification where it is most likely to be found.

Philosophers who viewed the religious question as merely the provision of intellectual evidence, ignore the most important aspect of religion which is the subjective experience of the believer. The religious experience of the believer is more significant than the intellectual argumentation which tends to miss the whole point of what is significant in religion. This is why James seeks to provide empirical justification for religious belief. In his attempt, he follows the scientific philosopher in his insistence on the necessity of providing an empirical evidence for beliefs, if they are to be counted as true, and shares with the speculative philosopher his tenet that religious beliefs can be evidentially justified. He departs from them in their conclusions. James's position is that the evidence for religious belief can be provided and is empirical. This treatment of religious belief might best be seen in the context of the conflict between those opposing views.

James's attitude towards religion is marked by his rejection of the attempts at the provision of conclusive rationalist arguments for it and the adoption of the more appropriate task of trying to articulate the way in which subjective experience provides justification for religious belief which is *per se* empirical. Underlying this empirical approach to religion is James's conviction that religion, like science, can be justified on empirical grounds. In his view, religion could not retreat while science advanced: it too must change as science did. As has been said in chapter two, James was writing at a time that was predominantly scientific. Positivism and agnosticism were then very common. He recognised how science was used to support such positions. The root of this repudiation of religious belief is the claim that religious beliefs cannot be justified in the same way that scientific beliefs can through empirical evidence. For positivists and agnostics, religious experiences are personal, subjective, and thus lack any evidentiary significance of the kind which support scientific beliefs. They view the justification in terms of religious experience as entirely subjective and hence regard religious claims as lacking the appropriate kind of justification.

An examination of James's view of religion is proposed in this part including a demonstration of how an understanding of his view of the methodology of science is crucial to understanding his views on religious belief and religion in general. An attempt has been made in previous parts to show the close linkage between pragmatism and the scientific method, a relationship that played a significant role in limiting pragmatism to a theory of meaning and truth. In his discussions of pragmatism in both of these, James was always concerned to examine its implications for religious beliefs and their justification. Hence, it is not surprising to see the significant influence of James's views on scientific methodology and his pragmatism on his views on religion.

This treatment of James's views on religion is largely concerned to show the extent to which his position towards the experimental method of empirical science is crucial to understanding his views on religious belief and religion. For instance, his doctrine of 'the will to believe' can only be properly understood and appreciated in the context of his general theory of belief, including scientific belief. The question of religious belief and its justification should be seen within the context of James's characterisations of scientific belief and its justification. This account of James's view of religion focusses on a close examination of the genesis and the relationships between types of beliefs: scientific, religious, moral and logico-mathematical; of verification and falsification in religion; of the justification of religious beliefs. The main works of James that bear directly on these issues are *The Principles of Psychology,* 'The Will to Believe', both essay and volume, and *The Varieties of Religious Experience.*

2. TYPES OF BELIEFS

Within a total system of beliefs, various types enter. These James classifies into different categories according to their origins. In the last chapter of *The Principles of Psychology,* James examines the genesis of the natural sciences, of the pure sciences, of metaphysical axioms and æsthetic and moral principles. What concerns us here in examining the way he divides the different types of propositions, is to see what is the status of the religious beliefs in relation to scientific and other propositions.

James was largely concerned with the extent to which the various types of truths are products of external reality. This issue raises the following questions. Are the different kinds of propositions merely the creatures or the 'off shoots' of our

environment? Or do they originate inside the mind? James's answer is that some propositions are the effects of environment while others are not. Hence, there is a distinction between two categories of propositions: those produced by external reality and those which originate in the mind. This initial distinction gives the starting-point to James's classification of the various kinds of propositions.

Let us first consider the case of natural sciences. In his discussion of their genesis, James points out that scientific conceptions are not coerced on us by external reality.

> Our 'scientific' ways of thinking the outer reality are highly abstract ways. The essence of things for science is not to be what they seem, but to be atoms and molecules moving to and from each other according to strange laws. Nowhere does the account of inner relations produced by outer ones in proportion to the frequency with which the latter have been met, more egregiously break down than in the case of scientific conceptions. The order of scientific thought is quite incongruent either with the way in which reality exists or with the way in which it comes before us. Scientific thought goes by selection and emphasis exclusively. . . . what we *think* is an abstract system of hypothetical data and laws.[1]

He continues that:

> Every scientific conception is in the first instance a 'spontaneous variation' in someone's brain. . . . Their genesis is strictly akin to that of the flashes of poetry and sallies of wit. . . . But whereas the poetry and wit (like the science of the ancients) are their 'own excuse for being,' and have to run the gauntlet of no farther test, the 'scientific' conceptions must prove their worth by being 'verified.' This test, however, is the cause of their *preservation,* not that of their production.[2]

Hence, the propositions of the natural sciences are non-empirical. They are so because of their origin. They are not effects of the environment. They differ fundamentally from the proximate laws of nature, 'empirical truths', which are duplicates or reproductions of the order of external experience.

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[1]James, PP, II, 1230-31.
[2]James, PP, II, 1232-33.

> The only cohesions which experience in the literal sense of the word produces in our mind are, as we contended some time back, the proximate laws of nature, and habitudes of concrete things, that heat melts ice, that salt preserves meat, that fish die out of water, and the like. Such 'empirical truths' as these we admitted to form an enormous part of human wisdom. The 'scientific' truths have to harmonize with these truths, or be given up as useless; but they arise in the mind in no such passive associative way as that in which the simpler truths arise.[3]

Thus, what makes a proposition empirical or non-empirical is its origin or genesis, namely, whether it is coerced on us by outer reality or derives from the mind. The propositions of the pure sciences are "even less than the natural sciences effects of the order of the world as it comes to our experience."[4] For that reason, they are classified as non-empirical expressing exclusively results of comparison. It should be pointed out that although both the propositions of the natural sciences and those of the pure sciences are non-empirical, the former, as James has just said, have to conform with empirical propositions, i.e., the proximate laws of nature (and physical theories). In this sense, they cannot be said to be expressing results of comparison exclusively and consequently in this aspect differ from the propositions of the pure sciences. Hence, no matter how abstract our scientific conceptions are, they had to acquire empirical justification. This suggests that James held that the propositions of the natural sciences and those of the pure sciences, which he calls 'rational propositions', though they have similar origins, differ in that the former are verified by sense-experience. The verification implies that the ideal and inward relations among the objects of our thought are reproductions of the order of outer experience. These forms of relations are congruent with the outer order of the passively received experience. These ideal systems of rational relations are then applicable to the real world.

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[3]James, PP, II, 1233-34.
[4]James, PP, II, 1237.

However, there are systems of ideal relationships which have not yet been shown to be congruent with the real world and are, in that sense, not as yet verified. These are propositions which express metaphysical axioms and propositions which express aesthetic and moral principles.[5] Such propositions are not empirical generalisations and for this reason they are classified as non-empirical. Although they are similar to the propositions of the natural sciences in that they do not only express the results of comparison, but differ from them in being as yet unverified. Metaphysical propositions, James tells us, are those which are

> formulated in such metaphysical and æsthetic axioms as "The Principle of things is one"; "The quantity of existence is unchanged"; "Nature is simple and invariable"; "Nature acts by the shortest ways"; *"Ex nihilo nihil fit"*; "Nothing can be evolved which was not involved"; "Whatever is in the effect must be in the cause"; "A thing can only work where it is"; "A thing can only affect another of its own kind"; *"Cessante causa, cessat et effectus"*; "Nature makes no leaps"; "Things belong to discrete and permanent kinds"; "Nothing is or happens without a reason"; "The world is throughout rationally intelligible"; etc.[6]

Such principles, James calls 'postulates of rationality' and not propositions of fact. One can at best *hope,* James says, that these principles will eventually be verified. They can only function now as ideals with which we hope that the facts will conform. Referring to metaphysical principles, James writes as follows:

> Many of the so-called metaphysical principles are at bottom only expressions of æsthetic feeling. Nature is simple and invariable; makes no leaps, or makes nothing but leaps; is rationally intelligible; neither increases nor diminishes in quantity; flows from one principle, etc., etc.,—what do all such principles express save our sense of how pleasantly our intellect would feel if it had a Nature of that sort to deal with? The subjectivity of which feeling is of course quite compatible with Nature also turning out objectively to be of that sort, later on.[7]

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[5]James, PP, II, 1262.
[6]James, PP, II, 1262-63.
[7]James, PP, II, 1265.

The last sentence is very important in emphasising that the subjectivity of metaphysical principles is not wholly independent of the objective facts which furnish the ultimate test of the validity of these principles. We try to show how nature conforms with such ideals, and to a certain degree we succeed in this, so making nature more intelligible. However, our ultimate goal is the successful application of those ideals to the real world in a manner similar to that in which scientific conceptions are applied to nature. Thus, James considers metaphysical ideals as not yet verified. The example of physics and its successful application of scientific conceptions, James says, gives us grounds for hoping that metaphysical principles too can ultimately be verified in the same way that propositions of the natural sciences have already been verified.

> Metaphysics should take heart from the example of physics, simply confessing that hers is the longer task. Nature *may* be remodelled, nay, certainly will be remodelled, far beyond the point at present reached. Just how far?—is a question which only the whole future history of Science and Philosophy can answer.[8]

What James is saying is that scientific conceptions were once in the state in which metaphysical principles are now: 'postulates of rationality', 'ideal prototypes of rational order' which await verification. This point is significant. It is so because it tells us that metaphysical principles may at a later stage be subject to empirical verification just as are scientific conceptions. The ultimate test of the validity of metaphysical principles is their being empirically verified, when it is proven that these ideal systems conform with the real order; in short, when sensible phenomena verify these ideal models formulated by the mind.

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[8]James, PP, II, 1264.

When what James says about metaphysical principles as expressions of aesthetic feeling is considered, this should not be taken as representative of the way in which he characterises these principles. It has just been shown that it is not. We may, therefore, at first glance agree with Ayer, for example, when he says that James "does explicitly say that in many cases what pass for metaphysical principles are no more than expressions of aesthetic feeling."[9] We may disagree with him, however, when we realise that Ayer totally ignores the qualifications imposed by James on metaphysical principles which allowed him to speak of them as expressing feeling. In PP, it should be emphasised that James must not be taken as holding that metaphysical propositions are cognitively devoid of content, as Ayer and other twentieth-century positivists had held. James maintained that the truth of metaphysical propositions can neither be determined now on empirical nor on logical grounds; hence his adoption of the view that feeling is what metaphysical principles express. It should be pointed out that James is not entirely clear on how feeling is shown to play a role in determining which metaphysical principles to accept. Furthermore, this view of James in PP, which seems to restrict the role of feeling to the class of metaphysical propositions only, was later abandoned by him in *Pragmatism,* in which he moved towards a holistic view, where subjective factors play a role in determining the truth of all propositions, as indicated earlier in Part One.

Concluding the discussion of James's view of metaphysical principles in PP, a comparison is made between them and scientific propositions. It seems to me, according to James, the following holds:

(1) metaphysical principles are similar in origin to the propositions of the natural science, inasmuch as both are non-empirical in origin;

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[9]Ayer, *The Origins of Pragmatism*, 209.

(2) neither metaphysical nor scientific propositions express merely relations of ideas, while those of logic and mathematics only express relations of ideas;
(3) scientific propositions have already been verified, while metaphysical propositions await verification, the latter not *now* being subject to empirical tests of verifiability;
(4) in the case of scientific conceptions, the verification occurs when the mental or ideal relations constituted by the mind conform with the real order or sensible phenomena; what is required of metaphysical propositions in terms of their verification is the same as scientific ones; though this congruence has not yet been achieved, it is, nevertheless, required if the verification is to take place;
(5) although subjective feeling is what metaphysical principles express *now,* and as such are not as yet verified, they will eventually be verified, just as the scientific propositions have been verified, and thus cease to be simply expressions of aesthetic feeling.

What has been said about James's view of metaphysical principles can be extended to religious propositions. In his discussion of the different kinds of propositions in PP, James does not explicitly talk about the status of religious beliefs. It seems reasonable to categorise them along with metaphysical principles. They can easily and justifiably be placed in the class that includes metaphysical principles, aesthetic and moral propositions. The main features of metaphysical principles would pertain equally to religious propositions. A similar comparison can be made between religious propositions and scientific propositions.

Before continuing into the next section, it should be recalled that the aim of this discussion of James's views on religion is to show how the ideas which he brought from science bear on those views. The structure of this discussion will follow

roughly similar lines to the discussion of his account of truth; so I proceed to an examination of how the propositions following from his views on science bear on his views on religion. The main focus is on the following:

(1) James's account of religious belief, which is pragmatic and not realist;

(2) James's rejection of natural theology on scientific grounds;

(3) the idea of the absolute in religion;

(4) the empirical justification of religion;

(5) the multiplicity of religious doctrines of which no one can be said to be the truest;

(6) the justification of religion in *The Will to Believe* and *The Varieties of Religious Experience;*

(7) verification and falsification of religious hypotheses.

3. PRAGMATISM IN RELIGION

In Part Two, it was argued that James's account of truth is a pragmatic and not a realist account. An attempt has been made to defend James against the charge of subjectivism by formulating the two conditions of truth (verifiability and satisfactoriness) and the relationship between them, which puts objective constraints on the belief's satisfactoriness, thus securing a substantial degree of objectivity to truth claims. Hence the truth of any belief is constituted by the consequences that follow from what is believed and the consequences that follow upon believing it. It follows that religious beliefs cannot be held only on the basis of their satisfactory consequences for the believer.

This interpretation, however, is not shared by commentators such as Ayer, Russell and many others who argued that in James's theory of truth, religious beliefs lose any objective significance. What constitutes their truth, they argue, is the satisfaction and the moral fulfilment that they offer for the believer. Ayer has argued for that view which seems to deprive religious claims of any meaningful content. To quote Ayer again:

> The main point for James is that so long as people are psychologically able to have religious faith, and so long as it gives them emotional satisfaction, the beliefs which are its embodiment may be allowed to pass for true.[10]

Further he writes:

> [H]is equation of what is true with what one finds it satisfying to believe applies only to questions of faith or morals, with regard to which there are no ascertainable facts. . . . we must remember that the question whether any given belief is true is always construed by James pragmatically as the question whether it is to be accepted; and religious and moral beliefs present themselves for acceptance or rejection like the rest. It is just that in their case the criteria by which James wishes to determine whether they are acceptable come down to being purely subjective.[11]

Such remarks about James's pragmatic view of religious belief are not completely without foundation. As it is often the case with James, he makes some claims that once taken out of context are likely to undermine completely his position. Consider the following passage, which is favoured by James's critics. In *Pragmatism,* towards the end of the last lecture (VIII) he says that:

> On pragmatistic principles, if the hypothesis of God works satisfactorily in the widest sense of the word, it is true.[12]

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[10]Ayer, *The Origins of Pragmatism*, 223.
[11]Ayer, *The Origins of Pragmatism*, 223.
[12]James, PRAG, 143.

What does this statement exactly tell us about the proposition 'God exists'? On close examination, it tells one thing for Ayer and Russell and quite a different thing for James. In the first case, if one held a realist point of view, that of Russell and Ayer, the message that is taken as being representative of James's position runs along the following lines. Believe that God exists because it is psychologically or morally fulfilling and it helps you to cope with experience successfully. Indeed, such a claim outrages believers and non-believers alike. It is really very unhelpful for someone to whom the question of God's existence is at stake and who is struggling hard with his doubts to be told just that. Hence, one can at the outset justifiably sympathise with Russell's and Ayer's reasoning which amounts to saying that one's belief that 'God exists' is true iff God exists. It hardly makes sense to believe that God exists unless it as an established fact that he does so. In other words, for him, the belief that 'God exists' is true iff it corresponds to the fact 'that God exists'. The issue is that to talk about the truth of the proposition 'God exists', God must exist in fact independently of one's claims about Him, whether one believes in him or not. Although this criticism may sound to many ingenious, it is, nevertheless, based on a lack of appreciation of James's pragmatic position. It has been shown in the previous part that James does not equate the belief that x and the fact that x exists. Any acceptance of Russell's realist position would imply the outright rejection of James's pragmatic position. What seemed to Russell to be wrong-headed in James's claims about religious beliefs is the latter's denial that true propositions have objective reference since for Russell and other realists, a true belief is one which corresponds to an independent reality that exists.

For James, however, the objective reference of the proposition 'God exists' is not logically independent of the consequences of believing it. There is no such independence of facts from the experiences of the individuals. What constitutes the

truth of the belief that 'God exists' is not a correspondence relation between the proposition 'God exists' and the fact that He exists. It is, rather, the consequences that follow from the belief itself AND those consequences for the believer from believing it. Here there are two opposing views: (1) James's pragmatic view which stresses that the truth of religious and other beliefs cannot be obtained independently of human experience and (2) Russell's realist view which emphasises that the truth of beliefs, religious ones in this case, is logically independent of the context in which the truth claim is made. It depends on the fact to which the belief corresponds actually existing.

Returning to the previous quotation of James, it reads:

> On pragmatistic principles, if the hypothesis of God works satisfactorily in the widest sense of the word, it is true. Now whatever its residual difficulties may be, experience shows that it certainly does work, and that the problem is to build it out and determine it, so that it will combine satisfactorily with all the other working truths. I cannot start upon a whole theology at the end of this last lecture; but when I tell you that I have written a book on men's religious experience, which on the whole has been regarded as making for the reality of God, you will perhaps exempt my own pragmatism from the charge of being an atheistic system. I firmly disbelieve, myself, that our human experience is the highest form of experience extant in the universe.[13]

It is clear, from what James is saying, that only *if* the hypothesis of God works, then it is true. This hypothetical is conditioned by the two conditions that James has set earlier concerning the meaning of the working of a hypothesis. It means two things: that the hypothesis must cause the least disturbance to previously held beliefs and that it must lead to some sensible terminus that can be empirically verified.[14] If the hypothesis of God is shown to 'combine satisfactorily with all other working truths' and also to be empirically verifiable, then it is true. James continues to say that

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[13]James, PRAG, 143.
[14]James, PRAG, 104.

experience does show that the hypothesis of God 'certainly works', in the sense just described. However, he does not jump to the conclusion that the hypothesis of God is true because experience shows that it works. To provide a proof of the hypothesis of God's existence is not a straightforward matter. It involves the satisfaction of the two criteria of truth, verifiability and satisfactoriness. In the above quotation, James focusses on the satisfactoriness condition, claiming that in order that the hypothesis of God be true, it must be consistent with other truths within the individual's total system of beliefs. For the consistency with other beliefs is one form of satisfaction, as was shown in Part Two. It is clear from what James is saying that, in this particular quotation, and indeed in this lecture, he is focussing on the subjective aspect of the truth of religious belief. The rest of the quotation is a reminder of the objective condition of truth upon which the satisfactoriness condition is dependent. Hence the requirement that religious beliefs be empirically confirmed by experience, a topic to which he devoted his work on religious experience.

James's pragmatic view of religion is a direct application of his pragmatic view of truth, which some had claimed to be an unfortunate one. A suspension of judgement on his views will remain in place till the end of this part to give him a fair hearing. The focal point in this discussion is that in the case of religious and other beliefs, James draws a sharp distinction between the consequences of propositions and the consequences that follow from believing them. The previous part of the thesis has demonstrated how the relation between these two types of consequences is to be conceived.

Over his many dealings with the problem of religious belief, one can witness a shift of emphasis in James's discussion. This situation should not lead us to thinking that he abandoned one or the other of these types of consequences, subjective and

objective. The way he stresses at times the role of subjective consequences makes it misleadingly appear as if these were the sole constituent of the truth of religious beliefs, while this is only partially the case. The distinction between the subjective and the objective in determining the truth of religious beliefs was always present in his mind, though often not explicitly pointed out during his discussions of religion.

Thus, James's pragmatic view of religious belief has been confusing to some and ridiculous to others. What is needed now is an examination and clarification of his basic assumptions and assessment of his whole attempt to establish religion on empirical grounds. A start is made by examining in detail the two distinct, though dependent, conditions of the truth of religious beliefs. We start first by examining the subjective factors that co-determine the truth of religious belief; that is the consequences for the believers of holding them. This is the topic of the next section.

4. RATIONALITY OF RELIGIOUS BELIEF

James's renowned essay 'The Will to Believe', which is the first essay of a volume collection of essays under the same title, is often taken to offer a defence of the right of the individual to religious belief. An attempt will be made to show this essay as a defence of the right to believe of any belief, scientific, moral or religious alike. The discussion will be restricted to religious and scientific beliefs. Here the comparison between these two kinds of beliefs is helpful in clarifying the basic assumptions that lie at the core of James's defence of religious belief.

James defended the experimental method of science against the Baconian conception of the scientist as a passive spectator. He emphasised, as discussed in Part One, the

active experimentalism of science, particularly the way in which scientific hypotheses are initially held unwarranted. For the scientist must believe in an hypothesis to a degree that would initiate the interest of testing it. It would be difficult to envisage how else science could progress without a starting-point of the adoption of an hypothesis which has yet to be verified or falsified.

James argues for a policy of risking belief. All beliefs including scientific ones are fallible and subject to revision in the future. None is absolutely true or absolutely false. This holds true as a general policy of belief. The two hallmarks of his general view of belief are:

(1) beliefs cannot said to be definitively justified. (fallibilism);

(2) beliefs can be held in advance of evidence (policy of risking belief).

This applies to all beliefs, but since the focus is on scientific and religious ones, discussion will be restricted to them. What might follow from this characterisation of scientific and religious beliefs is that both kinds of hypotheses are subject to confirmation or disconfirmation by experience. A religious doctrine that is not open to any kind of empirical verification is one which is undoubtedly meaningless and so, fails to qualify as an appropriate candidate for belief. Indeed, for James, according to his pragmatism, any hypothesis of any kind that does not make an empirical difference is meaningless. How this might be achieved in the case of religious hypotheses required a lot of working out by James, for requiring exploration of what exactly the empirical difference a religious hypothesis could be said to make for its holder.

5. TWO KINDS OF RATIONALITY

In his essay 'The Sentiment of Rationality',[15] reprinted in the WB volume, James examines the reasons underlying the act of philosophising. He begins the essay by raising the following questions:

> What is the task which philosophers set themselves to perform; and why do they philosophize at all?[16]

The answer follows immediately:

> They desire to attain a conception of the frame of things which shall on the whole be more rational than that somewhat chaotic view which everyone by nature carries about with him under his hat.[17]

But how can one be sure that what had arisen from one's own experience is a rational conception? What are the essential features of that experience which give rise to such conception as that of rationality? James assures us of the existence of some 'subjective' marks, that once recognised, give confidence that 'rationality' has been attained. These he lists as follows:

> A strong feeling of ease, peace, rest, is one of them. The transition from a state of puzzle and perplexity to rational comprehension is full of lively relief and pleasure.[18]

The experience of rationality, James continues, is one in which the sense of irrationality is absent.[19] In this respect, it is not dissimilar to the experience of breathing. Just as we sense no special pleasure when our breathing is perfect or

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[15]A reprint of an address to the Harvard Philosophical Club, delivered in 1880 and published in the *Princeton Review,* July, 1882.
[16]James, 'The Sentiment of Rationality' in WB, 57.
[17]James, 'The Sentiment of Rationality' in WB, 57.
[18]James, 'The Sentiment of Rationality' in WB, 57.
[19]James, 'The Sentiment of Rationality' in WB, 58.

going smoothly, we feel distressed when our respiration is blocked in some way. Similarly, what distinguishes rationality is our experience of uninterrupted fluency of thinking.

> This feeling of the sufficiency of the present moment, of its absoluteness—this absence of all need to explain it, account for it, or justify it—is what I call the Sentiment of Rationality. As soon, in short, as we are enabled from any cause whatever to think with perfect fluency, the thing we think of seems to us *pro tanto* rational.[20]

Hence an irrational thought is a disruptive one which prompts us into attempting to get rid of it and return thought to its fluency. As it is the case with James, he challenges us to discover a better conception of rationality, if we judge his to be all too subjective and inadequate. Setting this question to one side, the discussion now moves to how the experience of fluency of thought, also called the experience of rationality, can be arrived at. James tells us that it can be obtained in two ways: a theoretical way and a practical way. There are two conceptual modes, James says, which assist the obtainment of rationality. We shall examine each respectively.

5.1 THEORETICAL RATIONALITY

There are two aspects of theoretical rationality to be sought in the way of thinking. On the one hand, there is the requirement, or the passion as James refers to it, of simplicity (or simplification); "The passion for parsimony, for economy of means in thought."[21] There is, on the other hand, the passion for distinguishing; "the impulse to be *acquainted* with the parts rather than to comprehend the whole."[22] This second

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[20]James, 'The Sentiment of Rationality' in WB, 58.
[21]James, 'The Sentiment of Rationality' in WB, 58.
[22]James, 'The Sentiment of Rationality' in WB, 59.

requirement aims at doing justice to the uniqueness and the particularity of things. These two rival passions of clearness and simplicity challenge the thinker to find an equilibrium.

Though James admits the significance of these two aspects of theoretical rationality, he immediately warns us of their limitations. There is Spinoza's monist system which unites all things into one substance and there is Hume's system which separates everything. Both instances show us how favouring one mode over another; subordinating one mode to another, can result in philosophical systems which could never be universally accepted and essentially inconclusive.[23] Hence, James suggests that "the only possible philosophy must be a compromise between an abstract monotony and a concrete heterogeneity."[24]

What James is trying to convey to us is that we ought to recognise the difficulties and limitations of abstractness and of speculation themselves when establishing philosophical systems. The quest for simplicity and coherence results in the wholly abstract, while the demand for clarity and analysis leads to 'barren looseness and separateness' of everything. In the end, we must opt for a compromise which may be deemed as unsatisfactory in terms of either mode of theoretical rationality. Here, as thinkers' interests and intellectual needs vary owing to their philosophical temperaments, they are likely to opt for different degrees of coherence or analysis in the views they formulate. To appeal only to theoretical rationality seems somewhat unhelpful as a means for deciding or settling the differences between the different world-views that philosophers adopt.

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[23]James, 'The Sentiment of Rationality' in WB, 59.
[24]James, 'The Sentiment of Rationality' in WB, 60.

But even were an ideal conceptual framework established to resolve the tension between these two demands, it would still be the case that this system of thought needs justification and explanation for the reasons behind the preference for that particular system rather than its rivals. These cannot be easily resolved by the appeal to theoretical rationality. The situation is described by James as follows:

> Hence the unsatisfactoriness of all our speculations. On the one hand, so far as they retain any multiplicity in their terms, they fail to get us out of the empirical sand-heap world; on the other, so far as they eliminate multiplicity the practical man despises their empty barrenness. The most they can say is that the elements of the world are such and such, and that each is identical with itself wherever found; but the question Where is it found? the practical man is left to answer by his own wit.[25]

This tension between satisfying the demands of coherence and analysis limits the effectiveness of these two modes of theoretical rationality in judging which conceptual framework is the most conclusive. The theoretic need to reduce our chaotic world to simplicity and clearness cannot, on its own, justify our acceptance of one conceptual scheme rather than the other.

> [N]ought remains but to confess that when all things have been unified to the supreme degree, the notion of a possible other than the actual may still haunt our imagination and prey upon our system. The bottom of being is left logically opaque to us, as something which we simply come upon and find, and about which (if we wish to act) we should pause and wonder as little as possible. The philosopher's logical tranquillity is thus in essence no other than the boor's. They differ only as to the point at which each refuses to let further considerations upset the absoluteness of the data he assumes.[26]

Hence, both the boor's thoughts and the philosopher's speculations are in the end arbitrary. One must not stretch this analogy to its farthest limits by suggesting that the philosopher might succumb to boorish thinking. The significance of this analogy, however, is its indication that unless we appeal to criteria other than those of

[25]James, 'The Sentiment of Rationality' in WB, 61.
[26]James, 'The Sentiment of Rationality' in WB, 64.

theoretical rationality, the conceptual schemes of the philosophers and the boor's thoughts are in the final analysis arbitrary. What might tell us which of these views, the philosopher's or the boor's, is the more satisfactory is the degree to which one view harmonises better with the empirical evidence than the other.

But how can these judgements about the satisfactoriness of those world-views be made? Do the criteria of theoretical rationality help us in deciding which one to accept as the most satisfactory? At this point, James tells us that we must recognise the limitations of theoretical rationality in the sphere of producing conceptual and consistent schemes. We cannot merely dedicate ourselves to reflecting a great number of possible world-views. At some stage, there comes a time when we must think to ourselves, make a decision as to which is the more satisfactory, then that is the one, the choice of which, has significant implications on the lives we lead and our expectations and hopes. A choice has to be made between conflicting world-views and the criteria of theoretical rationality simply do not help us because of their limitations. In these circumstances an appeal to the second type of rationality is justifiable, namely, practical rationality. What, then, are the aspects of practical rationality and what are the conditions under which these criteria are applied? This is the topic of the next section.

5.2 PRACTICAL RATIONALITY

What constitutes the feeling of rationality in its practical aspect? As we have said earlier, James defines rationality as fluency in thought and irrationality as an impediment to thought. So, he can hold that any impediment to the perfect fluency of thought in the theoretical sphere can be eliminated by appealing to the criteria of

practical rationality. The criteria of practical rationality are essential in diverting the movement of thought from its "issueless channel of purely theoretic contemplation"[27] to its fluency and hence rationality. The conditions under which the application of the criteria of practical rationality is possible are crystal-clear. They are applicable only if all things are equal theoretically, that is, equally satisfying our logical needs. Hence,

> of two conceptions equally fit to satisfy the logical demand, that one which awakens the active impulses, or satisfies other æsthetic demands better than the other, will be accounted the more rational conception, and will deservedly prevail.[28]

James continues:

> There is nothing improbable in the supposition that an analysis of the world may yield a number of formulæ, all consistent with the facts. In physical science different formulæ may explain the phenomena equally well—the one-fluid and the two-fluid theories of electricity, for example. Why may it not be so with the world? Why may there not be different points of view for surveying it, within each of which all data harmonize, and which the observer may therefore either choose between, or simply cumulate one upon another?[29]

If so, it is presumably rational to extend the application of practical rationality in science to the more general realm of world-views. Just as our aesthetic and practical nature allows approval or rejection of formulae in science, when things are equal theoretically, application of practical rationality can be extended to approval or rejection of the various points of view about the world. But what are the criteria of practical rationality which will assist us in deciding between different world-views?

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[27]James, 'The Sentiment of Rationality' in WB, 66.
[28]James, 'The Sentiment of Rationality' in WB, 66.
[29]James, 'The Sentiment of Rationality' in WB, 66.

The first practical requisite which a philosophical conception should satisfy is that it *"must, in a general way at least, banish uncertainty from the future."*[30] The relation of a thing to its future consequences and the uneasiness to the mind caused by the ambiguity of the future would leave a concept as unrationalised, whereas, the peace and fluency that come to the mind when the demands of expectancy are satisfactorily met would turn a philosophical concept to a rational one. The banishing of uncertainty from the future can only be attained by the subjection of philosophical conceptions or more generally, world-views, to verifiability by experience. If it were true that future experience is of no relevance to that particular conception or world-view, then the conception itself would be of no interest to us and would lose its significance.

This first requisite, James says, is not by itself sufficient.

> It is not sufficient for our satisfaction merely to know the future as determined, for it may be determined in either of many ways, agreeable or disagreeable. For a philosophy to succeed on a universal scale it must define the future *congruously with our spontaneous powers.*[31]

This second aspect of practical rationality tells us that the future predictability of a philosophical conception is not by itself sufficient. It must be sensitive to our desires and needs. It must not 'disappoint our dearest desires and most cherished powers.' When weighing pessimism and optimism, all things being equal, optimism is more rational than pessimism because only the former promises the ultimate satisfaction of our wishes and powers.

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[30]James, 'The Sentiment of Rationality' in WB, 67.
[31]James, 'The Sentiment of Rationality' in WB, 70.

These two criteria of practical rationality are applied only when other things are equal theoretically. The contribution of personal elements enters under this condition. As seen in Part One, scientific concepts are formed by abstracting certain selected aspects of reality, the choice of which is influenced by our interests. To quote James:

> *[T]he only meaning of essence is teleological, and that classification and conception are purely teleological weapons of the mind.* The essence of a thing is that one of its properties which is *so important for my interests* that in comparison with it I may neglect the rest.[32]

We have also seen that for James, subjective qualities such as elegance, usefulness and congruity with our residual beliefs are all scientific values which we take into consideration in theory choice. Interests also influence our evaluations of the scientific evidence. The same collection of data may give rise to different conclusions by scientists depending on the orientation of their own interpretations of these data. These factors and the demand for successful predictions are all expressions of the practical need to eliminate uncertainty from the future. Science is strongly dominated by our theoretical needs. The appeal to practical rationality is conditional on the primary satisfaction of theoretical rationality. But James tells us that theoretical rationality is but one of the many human passions that we try to satisfy and the active prominence of one need over the other hinges upon the various forms of human inquiry; whether that of science, of metaphysics or religion. The influence of passion and interest is manifested in every world-view that might be posited and it is this personal contribution that gives a world-view its power and makes it convincing.

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[32]James, PP, II, 961.

James's notion of rationality is broader than his critics would permit, for it includes practical as well as theoretical criteria. According to James, a person who adopts beliefs on the basis of practical criteria is rational, but in a different way from that of theoretical rationality. One is justified in appealing to practical criteria by the adoption of the appropriate means to arrive at the desired end. Hence the role of prediction in practical rationality of the results that the adoption of the belief would lead to. The restrictions that James has imposed on the application of practical rationality makes it difficult for one to believe whatever one pleases.

The import of this discussion of the criteria of rationality is that passion and personal interests influence the beliefs that we hold and the way we assess their justification. The next section will consider how these criteria apply to religious belief. The issues are: What role do our theoretical needs play in the formulation of religious belief? How far do passion and personal needs influence our choices in religion? Does the interference of our personal needs in our choices make religion irrational? If not, then, can a rational justification of religious belief be given and what form can it take?

6. THE WILL TO BELIEVE

6.1 BACKGROUND

In a letter to Renouvier, dated August 4, 1896, James writes:

> I sent you a "New World" the other day, however, with an article in it called "The Will to Believe," in which (if you took the trouble to glance at

> it) you probably recognized how completely I am still your disciple. In this point perhaps more fully than in any other; and this point is central![33]

Perry reports that James's WB essay and the other essays of the WB volume, "are pervaded throughout by the influence of Renouvier."[34] Perry continues that James once wrote to Peirce that his WB essay was "cribbed from Renouvier."[35] So what are these views of Renouvier that James had cribbed in his WB essay?

For Renouvier, one cannot avoid making the choice between belief in freedom and belief in determinism which are mutually exclusive. We must choose one or the other and we cannot decide not to choose either. For, although in some issues one can suspend judgement, which seems the right thing to do, in other issues the consequences of the suspension of judgement is disastrous. For that reason, one is forced to make the choice. He writes:

> S'il en était ainsi, par la liberté comme par la nécessité, quoique sur des motifs tout contraires, la spéculation sortirait des voies de la raison pratique, du moins de celles qu'avouent les honnêtes gens de nos jours, et pour arriver aux mêmes conséquences funestes. Il semblerait dès lors qu'un parti moyen entre la liberté et la nécessité serait le plus utile, et la plus propre à dégager la morale. Mais un tel parti n'est tenable, s'il l'est, que pour le mystique, pour celui qui, sans s'arrêter à la contradiction, sape les fondements de la science, ensuite n'établit rien de net et de compréhensible. La liberté et la nécessité ne sauraient être ni simultanément vraies, ni simultanément fausses, car, de deux choses l'une, ou les actes humains sont *tous et totalement* prédéterminés par leurs conditions et antécédents, ou ils ne le sont pas *tous et totalement.* C'est ainsi que se pose la question logique. La doute serait donc notre seule ressource : mais le doute ne nous tire point de peine quant à la morale : s'il est souvent légitime en face des théories, il est la mort de l'âme dans les choses pratiques et touchant toute croyance d'où dépend la conduite de la vie.[36]

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[33]James, LWJ, II, 44.
[34]Perry, II, 209.
[35]Perry, II, 209.
[36]Renouvier, *Essai de Critique Générale, Deuxième Essai: Traité de Psychologie Rationelle D'après les Principes du Criticisme,* 330-31.

If the choice between belief in freedom and belief in determinism cannot be avoided, on what grounds can this choice be made? Renouvier tells us that it cannot be decided on intellectual grounds. For both doctrines, he argues, are logically indemonstrable. He says: "En résumé, la thèse de la liberté n'est pas démontrable logiquement, non plus que celle de la nécessité."[37]

In this case, where the matter cannot be decided on intellectual grounds, one is entitled to choose according to the kind of consequences that follow from choosing either doctrine. Hence, for Renouvier, one must choose freedom because the advantages that accompany the belief in freedom far exceed those that a belief in determinism promises.

> Dans l'impuissance de rien démontrer, l'unique ressource qui reste est d'affirmer la liberté à titre de postulat. La vérité, non pas prouvée, mais réclamée et digne d'être choisie, est celle qui pose un fondement pour la

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[37]Renouvier, *Essai* II, 89. The following quotations also express the idea of the impossibility of providing proof of either freedom or determinism. "Ces objections contre le système de la nécessité sont d'une grande force. Elle établissent en substance que le jugement de liberté est une donnée naturelle de la conscience et se lie à nos jugements réfléchis pratiques, dont il est même le fondement. C'est aussi ce que nous avons dû reconnaître dans l'analyse des fonctions volontaires.

Toutefois il n'en résulte aucune preuve logique de la réalité de la liberté. En effet, quand il s'agit des fonctions intellectuelles et sensitives, on distingue entre les phénomènes de conscience et la réalité de leurs objets, c'est-à-dire entre ces phénomènes, dont on ne donte point, et l'accord où ils sont peut-être, et peut-être ne sont pas, avec l'ensemble des groupes et séries de l'expérience. Ici, la distinction n'est pas moins justifiée, et toute vérification de l'accord ou du désaccord est en outre impossible."*Essai* II, 61.

Also in the following quotations where he argues that: "Après tout ce que j'ai dit en plusieurs lieux, et sous divers points de vue, de la probabilité d'existence d'une volonté libre, ou source de déterminations premières dans l'homme, et de l'impuissance où nous sommes néanmoins d'en obtenir une preuve de fait ou une démonstration logique, il est clair que la solution du problème ne peut plus être demandée qu'à la raison pratique. C'est une affirmation morale qu'il nous faut; toute autre supposerait aussi celle-là. En d'autres termes, la raison pratique doit poser son propre fondement et celui de toute raison réelle, car la raison ne se scinde pas : la raison n'est, selon notre connaissance, autre chose que l'homme, et l'homme n'est jamais que l'homme pratique."Essai, II, 322.

And finally, *"Impossibilité de démontrer la liberté, aussi bien que de démontrer la nécessité.* Si la thèse de la nécessité, par le scepticisme absolu auquel elle conduit, provoque cette «révolte de l'être entier» dont on a essayé de donner l'aperçu, en revanche la thèse de la liberté ne permet pas non plus à l'esprit de se reposer dans un savoir acquis démonstrativement. La liberté ne se démontre pas ; elle ne se constate pas davantage à la manière d'un fait, attendu que l'expérience n'atteint pas les possibles comme réels, mais seulement, ce qui est bien différent, la croyance qu'on en a, quand on l'a. «Elle est la condition *nécessaire* qui rend *possible* l'œuvre à la fois imparfaite et admirable de la connaissance humaine et l'œuvre du Devoir qui en découle, et c'est assez peut-être pour nous assurer qu'elle n'est pas une vaine conception de notre orgueil."*Essai,* II, 418-19.

> morale et aussi un fondement pour la connaisance pratique, indépendamment de laquelle on ne peut asseoir «la science.»[38]

Renouvier's main conclusion is that if one cannot decide on intellectual grounds which option to choose, then one is to choose the option that is morally beneficial for one to believe.

Although James acknowledges Renouvier's profound influence on his WB essay, he does not make any reference to his work or to him in the WB text. He does make, however, references to another source of influence, that of W. K. Clifford. Clifford (1845-1879) was a mathematician who held that rational believing can only be established on scientific foundations. His essay 'The Ethics of Belief' is cited by some commentators, as the background against which James's WB can be read. A brief examination of Clifford's basic claims and their influence on James is now required.

Clifford maintained that "it is wrong always, everywhere, and for anyone, to believe anything upon insufficient evidence."[39] He warns us of the horrid consequences that are likely to follow from adopting beliefs in absence of sufficient evidence. He paints this gruesome picture of what is likely to happen.

> Our words, our phrases, our forms and processes and modes of thought, are common property, fashioned and perfected from age to age ; an heirloom which every succeeding generation inherits as a precious deposit and a sacred trust to be handed on to the next one, not unchanged but enlarged and purified, with some clear marks of its proper handiwork. Into this, for good or ill, is woven every belief of every man who has speech of his fellows. An awful privilege, and an awful responsibility, that we should help to create the world in which posterity will live.[40]

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[38]Renouvier, *Essai*, II, 419.
[39]Clifford, 'The Ethics of Belief' in *Lectures and Essays,* 186.
[40]Clifford, 'The Ethics of Belief' in *Lectures and Essays,* 182.

> Whoso would deserve well of his fellows in this matter will guard the purity of his belief with a very fanaticism of jealous care, lest at any time it should rest on an unworthy object, and catch a stain which can never be wiped away.[41]
>
> That duty is to guard ourselves from such beliefs as from a pestilence, which may shortly master our own body and then spread to the rest of the town. What would be thought of one who, for the sake of a sweet fruit, should deliberately run the risk of bringing a plague upon his family and his neighbours?[42]
>
> In like manner, if I let myself believe anything on insufficient evidence, there may be no great harm done by the mere belief ; it may be true after all, or I may never have occasion to exhibit it in outward acts. But I cannot help doing this great wrong towards Man, that I make myself credulous. The danger to society is not merely that it should believe wrong things, though that is great enough ; but that it should become credulous, and lose the habit of testing things and inquiring into them ; for then it must sink back into savagery. . . . The credulous man is father to the liar and the cheat ; he lives in the bosom of this his family, and it is no marvel if he should become even as they are. So closely are our duties knit together, that whoso shall keep the whole law, and yet offend in one point, he is guilty of all.[43]

The exaggeration of the evil effects of allowing ourselves to accept any belief, even one single belief whatsoever its nature, before the evidence is fully available is obvious. First of all, Clifford does not specify what he means exactly by 'sufficient evidence'. It is not very clear to us how in such circumstances, individuals would become credulous and the entire society would 'sink back into savagery'. Also, it is not clear why the credulity of one person would encourage other persons to succumb to deceptiveness. If X knows of Y's credulity, X may or may not become credulous. The same is true with the inclination to cheat and lie. These claims seem to be highly doubtful and less than convincing. One can argue that in some ordinary life situations, when establishing relationships among themselves, people do proceed with a certain degree of trust. They do not enter into relationships encouraged by the

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[41]Clifford, 'The Ethics of Belief' in *Lectures and Essays,* 183.
[42]Clifford, 'The Ethics of Belief' in *Lectures and Essays,* 184.
[43]Clifford, 'The Ethics of Belief' in *Lectures and Essays,* 185-86.

outcome of a vigorous empirical inquiry that had pointed towards going ahead with the relationship.

Clifford tells us above that beliefs are not private, in the sense that they get communicated to the rest of the society. They have consequences for other people, with the possible risk of harming them, when held on insufficient evidence. Hence, we must guard ourselves from beliefs that lack sufficient evidence to avoid getting the society intoxicated with beliefs as such that can only jeopardise the well-being of the whole society. Take for instance the belief z that any existing appreciation of Dolly Parton's country songs will diminish completely soon after her death. Suppose that X holds the belief z now, in absence of sufficient evidence, and z was eventually circulated to the rest of the society, hence becoming a 'common property'. Subsequently, we may find that many people might agree with X and adopt z, while others, predominantly among them her loyal fans, might disregard z as complete nonsense, yet others may not bother either to accept z or reject it. It is highly doubtful that in these cases any of these three groups of individuals, would sink back into savagery.

What seems to be at issue here is not Clifford's principle in itself, for it ought to be commended and adopted as a general guiding principle for acquiring beliefs. It is, rather, the kinds of beliefs to which it can be applied. What we have tried to point out above is that in some, and may be many, ordinary life situations, this principle seems difficult to apply. If we wish to take Clifford's claims seriously, we should determine precisely the kinds of s to which it can be applied and the conditions under which the application can be carried out successfully.

James's WB essay, can be seen, in one aspect of it, as a classic response to the strict evidentialism that Clifford was advocating. James counters Clifford's rule, that we have a moral duty everywhere and at all times to believe anything only on the basis of sufficient evidence, by arguing that, although we should normally hold beliefs on the basis of adequate evidence, there are instances, such as the unverifiable belief that God exists, when we have a right to hold beliefs in advance of sufficient evidence. One of James's main concerns in the WB is to determine the conditions under which we are justified in accepting beliefs prior to sufficient evidence. It is beyond our concern here to examine James's exposition of Clifford's views and whether he has misrepresented his views or not, but some brief remarks may be helpful here.

James writes in the WB:

> Believe nothing, he [Clifford] tells us, keep your mind in suspense forever, rather than by closing it on insufficient evidence incur the awful risk of believing lies. You, on the other hand, may think that the risk of being in error is a very small matter when compared with the blessings of real knowledge, and be ready to be duped many times in your investigation rather than postpone indefinitely the chance of guessing true. I myself find it impossible to go with Clifford.[44]

The crucial point at issue here, is how far adopting belief is conjoined with the believer's acting on his belief. For James, if you believe x, then you will act on x. If you suspend judgement or choose to disbelieve, then you are refraining from action as well. His objection to Clifford's reasoning seems to centre on that issue. But if Clifford's thesis is about belief only and not action, then it would seem that he would not require, for example, an inquirer to stop his search for the verification of his hypothesis, just because he cannot believe it in light of insufficient evidence; nor

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[44]James, 'The Will to Believe' in WB, 24-25.

would he invite us to 'postpone indefinitely the chance of guessing'. This position that James ascribes to Clifford can hardly be maintained; that if one did not hold a belief due to insufficient evidence, then one will not be prompted to act in order to acquire evidence. James illustrates this point very clearly in the following.

> Suppose, for example, that I am climbing in the Alps, and have had the ill-luck to work myself into a position from which the only escape is by a terrible leap. Being without similar experience, I have no evidence of my ability to perform it successfully; but hope and confidence in myself make me sure I shall not miss my aim, and nerve my feet to execute what without those subjective emotions would perhaps have been impossible. But suppose that, on the contrary, the emotions of fear and mistrust preponderate; or suppose that, having just read the "Ethics of Belief," I feel it would be sinful to act upon an assumption unverified by previous experience—why, then I shall hesitate so long that at last, exhausted and trembling, and launching myself in a moment of despair, I miss my foothold and roll into the abyss.[45]

Now, whether Clifford's cited essay really implies this result, does not concern us here. What is important for us to point out is that for James, belief is measured by action. He tells us that "he who forbids us to believe religion to be true, necessarily also forbids us to act as we should if we did believe it to be true."[46]

Now we move on to consider the thoughts of another mathematician and scientist on the question of believing in light of insufficient evidence; we are referring here to the ideas of Blaise Pascal (1623-1662) advocated in his *Pensées,* published posthumously in 1670. He presents us with what has come to be known in literature as Pascal's wager. His wager is mainly concerned with the rationality of belief, in particular religious (Christian) belief, not with its truth. His response to the question of the existence of God is by adopting belief in Him. This seemed to Pascal to be the rational attitude to take when confronted with such a question in favour of which no evidence has yet been shown to be conclusive. For despite the insufficient evidence

[45]James, 'The Sentiment of Rationality' in WB, 80.
[46]James, 'The Will to Believe' in WB, 32n.

for belief in God, Pascal argues, it would be irrational not to believe if his wager wins. Hence, the audience at whom his Wager is aimed includes those unbelievers whom he wants to persuade to become believers.

Pascal begins by claiming that God is a mystery for us. We can never know His essence. We can know neither that he exists nor what he is like. He says that

> [i]f there is a God, he is infinitely incomprehensible because having neither dimensions nor limits, he has no relation to us. We are therefore incapable of knowing either what he is, or whether he exists.[47]

What we are sure of, however, is that there is a possibility of God's existence and of eternity. Once we recognise these possibilities, we realise how serious the situation we are in really is and how the matter ought to be attended to with the utmost concern. It would make us pause for a moment and think about the highly undesirable consequences in afterlife for those who do not believe, if it turned out that God existed.

Hence, we find Pascal having the highest sympathy with those who are distressed by their doubts about the matter and who take great pains at trying to get rid of doubt and attain faith. However, those who confront the religious question of God and eternity with indifference, Pascal tells us, do not actually realise the gravity of the situation. "Their neglect in a matter which vitally concerns themselves, their eternal destiny, their all", Pascal says, "irritates me more than it moves me; it astonishes and appals [sic] me: I find something monstrous in it."[48]

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[47]Pascal, *Pensées*, entry #343, 201.
[48]Pascal, *Pensées*, entry #11, 104.

He recognises that reason cannot help us to decide whether there is a God or there is not. For there is insufficient evidence to support either alternative and hence to convince us to adopt one hypothesis or the other. Hence, some will find themselves justified in abandoning the belief in God, others may regard it appropriate to suspend judgement. Pascal tells us that there are good reasons for not adopting either position. The practical consequences that follow from believing in God, upon recognising the possibility of His existence, is just too good to be ignored. Those who suspend judgement or disbelieve are committing a terrible mistake. Here Pascal presents us with a gambling game that we are forced to take part in. He writes:

> '[W]e have to wager. You are not a free agent; you are committed. Which will you have then? Come on. Since you are obliged to choose, let us see which interests you least. You may lose two things: the true and the good; and there are two things that you stake: your reason and your will, your knowledge and your beatitude; and your nature has two things from which to escape: error and unhappiness. Your reason is not more deeply wounded by choosing one rather than the other because it is bound to choose. That disposes of one point. But what about your beatitude? Let us measure the gain and the loss by saying: "Heads God exists." Let us compare the two cases; if you win, you win everything; if you lose, you lose nothing. Don't hesitate then. Take a bet that he exists. . . . there is no room for hesitation: you must stake everything. And so, since you are forced to gamble, you must abandon reason in order to save your life, rather than risk it for the infinite gain which is just as likely to turn up as the loss of nothing.'[49]

According to this reasoning, if one believed that God exists and it turned out that he did, the possibility of infinite gain and finite loss is realised. However, if it turns out that he did not exist, then what one ends up with is finite loss in terms of the earthly pleasures that one had to abandon. On the other hand, if one did not believe that God exists and it turned out that he does, then one is left with infinite loss coupled with finite gain. If God does not exist, then one only wins finite gain. Now, in light of our betting scores, wagering that God exists, Pascal insists, is the only rational decision to make. Given that God gives believers infinite gain and unbelievers infinite loss,

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[49]Pascal, *Pensées*, entry #343, 202-03.

and given that the reward that theism promises is infinite, then no matter how much pleasure or finite gain is won in life, in betting terms, the religious life is the better bet. No matter how small is the chance that God exists, it is unwise not to wager, because if he does exist, the reward for wagering is infinite in value.

But, what about those among us who cannot get themselves to bet in the first place? Pascal addresses the problem of those who struggle in pursuit of faith, but are sadly incapable of it. The sceptic says to him:

> '[M]y hands are tied and my lips sealed; I am forced to gamble and am not free; they will not let go of me. And I am made in such a way that I cannot believe. What do you expect me to do?'[50]

Pascal got an answer to this problem. He offers the following recipe for curing these poor souls from the disease of doubt:

> '[L]earn from the examples of those who like yourself were in bondage and who now stake their whole fortune: they are people who know the path that you would like to follow, and who have been cured of an ill of which you wish to be cured. Follow the method by which they began: it is by behaving as though they did believe, by taking holy water, by having masses said, etc. That will naturally make you inclined to believe and will calm you.'[51]

Thus, people who find it hard to believe while wanting to, can come to believe by imitating the behaviour of believers. This form of activity is supposed to put their persistent doubts to rest. It is not very hard to imagine philosophers', and indeed other people's, reactions to Pascal's advice on the method of attaining belief. It has been received with much hostile criticism and suspicion of immorality. For one, G. E. Moore's remarks about the wager that he would say nothing of it except that it seemed to him to be 'absolutely wicked'.

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[50]Pascal, *Pensées*, entry #343, 203-04.
[51]Pascal, *Pensées*, entry # 343, 204.

There are certain features of Pascal's argument which are relevant in connection with James's WB doctrine, which must be highlighted here. The first is Pascal's use of the gambling language in the different stages of his argument. As we have seen above, Pascal says to the sceptic that he must wager either that God exists or that He does not. He does not say to the sceptic that he must believe. The gains or losses that the sceptic might attain are dependent on his gambling on the existence of God. Pascal tells him that the infinite gains that he might get are the outcome of gambling on 'calling heads that God is'. When the sceptic told Pascal that he could not believe, Pascal replied by offering his advice on following the way by which other believers started and do as they do. These believers who attained faith have 'now staked their whole fortune'. They are the great models who have established themselves now as gamblers. When the sceptic replied that that is exactly what he is afraid of, Pascal surprisingly replied: "'But why? What have you got to lose?'"[52] Indeed, if the infinite gain is conditioned upon gambling, then the sceptic would have nothing to lose in gambling. If he cannot force himself to gamble, then the infinite gain is surely lost. If the sceptic cannot believe, then there is much to be lost, namely, infinite gain which is conditioned upon belief. The sceptic's main problem, as Pascal sees it, is that he knows that he is 'forced to gamble' and yet he cannot bring himself to do so. Hence Pascal's advice. If he cannot bring himself to gambling, he could look up to those gamblers who have staked all their fortune on God's existence. He could direct his attention to those believers who attained faith and who gamble everything on God's existence, then he will find that he would be able to attain faith himself. He can start the process, step by step. First by thinking of all these gamblers and what they have put at stake, then he can move on to taking holy water and masses until he is prepared to stake all his fortune on God's existence.

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[52]Pascal, *Pensées*, entry #343, 204.

Here we must say a word about Pascal's view of the role of the will in acquiring beliefs. He restricts the role of the will to directing one to choosing to look at the world from one aspect rather than another. The way that the will directs us influences what we are likely to observe in the world. Pascal is careful to point out that his view does not imply that the will creates belief, it only shows the important role of the will in the formation of beliefs.

> The will is one of the principal organs of belief; not because it forms belief, but because things are true or false according to the angle from which we look at them. The will, which finds one more agreeable than another, diverts the mind from the consideration of the qualities of those which it does not like to see; and so the mind, marching in step with the will, stops to examine the side that appeals to it; and so it judges by what it finds there.[53]

Accordingly, in religious matters, one chooses to see what one wills to see. If one wanted to see the good aspects of religion, one will undoubtedly see them. If one chooses to focus one's attention on the defects and inadequacies of religion, one is likely to find them.

We are forced to wager because reason alone cannot settle the question of the existence of God.[54] Hence, we are obliged to choose either to believe in God or not. There is a small chance that God might exist and hence, the question of his existence is one that is worth considering; bearing in mind the benefits of infinite gain that we might obtain if it turned out that God exists; there is good deal at stake to make us consider this question seriously.

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[53]Pascal, *Pensées*, entry #375, 210.
[54]"If you rely on reason you cannot settle for either, or defend either position." Pascal, *Pensées*, entry #343, 202.

6.2 JAMES'S THESIS

For James, the fulfilment of interests and desires are stronger than any intellectual rules or principles. What is paramount in human life is human striving and the desire to fulfil needs and purposes. If this element of human life is stronger than the intellectual aspect, then beliefs cannot appropriately be given a justification that is simply based on intellectual grounds. But what does it mean to hold a belief on non-intellectual grounds? The immediate answer is that the believer holds his belief because it satisfies his own aims and desires, even if in terms of evidence, the belief is insufficiently justified.

That is not precisely the point for James; his focus is on the issue of holding a belief prior to the attainment of evidence. From a psychological point of view, people adopt beliefs simply on the basis of subjective needs without adequate intellectual evidence. But many have disagreed as to the implications of this psychological fact on philosophical discussions including those of religion. In the case of religious belief, we are faced with a completely different situation; it is a question of specifying the conditions under which we might hold religious beliefs prior to adequate evidence. Many of James's critics reject his view that emotional considerations can offer any form of justification for beliefs of any kind. Only rational grounds provide the appropriate justification for beliefs. This standard criticism was addressed by hostile critics and has appeared in different versions of which we shall mention some that are representative.

James's discussion of the conditions under which we may adopt religious beliefs is set out in his renowned essay 'The Will to Believe'. As with his account of truth, this essay was widely read and misread by critics and has engendered much criticism.

Although written over a hundred years ago,[55] it still raises much the same criticisms that were raised by James's contemporaries. The following list captures the most common criticisms and arguments.

(1) In holding that beliefs may be held in advance of adequate evidence, James was promoting wishful thinking and being unreasonable. If a person is to believe whatever he wishes in absence of adequate evidence, then on James's view, no belief can be described as too irrational to be upheld. That one can choose to believe anything that one likes for whatever reason or for no reason at all, would be justified on James's view.

(2) James wrongly claims that we do exercise some control over what we believe and the fact of the matter is that we do not have this control. We cannot hold or reject beliefs in the same way that we can turn the heater or (TV) on or off.

(3) James's position leads to irrationality and self-deception. Self-deception might seem, on James's view, rational. A person who adopts inadequately justified beliefs will be deceiving himself about many things as to the nature of things related to that particular belief. The extreme effect of this is that in such a state of affairs, more and more of false beliefs are likely to be engendered and so become embodied in the total system of beliefs.

(4) Many understood the essay as an attempt to give a justification for the existence of God as established in traditional theism.

(5) What James was defending can hardly be called faith and does not deserve to be called so.

(6) James was encouraging or advocating belief for belief's sake; offering a licence to belief.

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[55]It was originally given as An Address to the Philosophical Clubs of Yale and Brown Universities. First published in the *New World* in 1896.

James's response to his critics was marked by his insistence that his essay was misread and misinterpreted. In a letter to Peirce, dated February 3, 1899, James tells him that he had been "in much hot water lately"[56] over his WB thesis. The responses of his critics surely had produced the intolerable heat. Sometimes he blamed the unlucky title given to the essay. Had he called it 'The Right to Believe', critics such as Dickinson S. Miller, "would have been without a pretext for most of what he says."[57] Miller's article on the WB, James writes, is "a complete *ignoratio elenchi,* and leaves untouched *all* my [James's] contentions in the *Will to Believe.* "[58] Another critic, L. T. Hobhouse, had substituted for James's essay *"a travesty* for which I [James] defy any candid reader to find a single justification in my text."[59] Out of complete frustration at A. E. Taylor's misrepresentation of his essay, James sends up a prayer:

> [A]nd I cry to Heaven to tell me of what insane root my "leading contemporaries" have eaten, that they are so smitten with blindness as to the meaning of printed texts.[60]

It must be conceded, however, that, as is the case with his account of truth, it was not entirely the fault of his critics. His statements in the WB were not very clear. His position was not as clear as he thought it was. No discussion or reply to individual critics will be attempted here, this is solely an attempt to clarify James's main theses and reply to the general objections listed above. This is in the context of my main thesis, namely, as to how some ideas of James's view of science helped to shape his WB doctrine and his general views on religion. The WB doctrine will now be discussed in detail.

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[56]Quoted in P. K. Dooley's *Pragmatism as Humanism: The Philosophy of William James*, 83.
[57]Perry, II, 243.
[58]Perry, II, 243.
[59]Letter to Hobhouse, August 12, 1904, in Perry, II, 245.
[60]Letter to Hobhouse, August 12, 1904, in Perry, II, 246.

James describes the WB as

> an essay in justification *of* faith, a defence of our right to adopt a believing attitude in religious matters, in spite of the fact that our merely logical intellect may not have been coerced.[61]

What did James mean by this statement? And what kind of justification is he seeking to establish? From the discussion of the criteria of rationality in its two types, the sort of criteria which are appropriate to the establishment of religious belief are the practical ones, not the theoretical. Now the question is: Why are the criteria of theoretical rationality not applicable in the case of religious belief?

To appeal to the criteria of theoretical rationality for the justification of religious belief is to miss out on the whole essence of religion. In this specific case, the demands of theoretical rationality only lead to arbitrariness, and are of little help in such questions as those of religious belief. When James characterised the 'religious hypothesis' as a candidate for belief, he offered it a characterisation in the context of the criteria of practical rationality. One important point that must be made regarding this essay is that it is not concerned with any particular religious position or doctrine. Nor is James concerned with the theistic claims about the existence of a supernatural being that many would identify as God. He wrote once to James Leuba that he has "no living sense of commerce with a God"; that the Divine for him is

> limited to impersonal and abstract concepts which, as ideals, interest and determine me, but do so but faintly in comparison with what a feeling of God might effect, if I had one.[62]

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[61]James, 'The Will to Believe' in WB, 13.
[62]James's letter to Leuba, dated April 17, 1904, in Perry, II, 350.

God for him was only 'dimly' real and he never experienced his presence, yet he believed in him.[63] He regards the God of theology as a "disease of the philosophy-shop."[64] The question of establishing the existence of God is, for James, irrelevant to our religious faith.

This claim is undoubtedly unacceptable to those traditional theists among us for whom the existence of God is the central tenet of their religions and faith. James's WB essay ought not to be read as a defence of theism. It is, rather, as he says, a defence of faith and our right to have one. Having said that, those criticisms, and there are plenty of them, which charge him of making the existence of God a matter of personal desire have hardly any grounds to support their claims.[65]

Before embarking on the discussion of James's main thesis in the WB, it should be emphasised that in the WB, James, though mainly concerned with defending the justification of faith, as he explicitly offers in his essay, his main intention is to highlight the pragmatic consequences of religious belief. His goal is to show that religious questions cannot be decided by rational arguments or scientific evidence. Hence, the appeal to the pragmatic consequences that belief carries for the individual believer is the only way that is likely to assist us in evaluating these beliefs. Later in the VRE, James's principal concern is to show that some religious claims can be empirically verified and thus possess some degree of objectivity. It cannot justifiably be maintained that, for James, religious beliefs are justified only by appealing to

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[63]See James's response to a questionnaire in 1904 in LWJ, II, 213-15.
[64]James's letter to Charles A. Strong, dated April 9, 1907, in LWJ, II, 269.
[65]For example, John Hick says that for James, "the existence or non-existence of God, of which there can be no conclusive evidence either way, is a matter of such momentous importance that anyone who so desires has the right to stake his life upon the God-hypothesis. . . . the basic weakness of James's position is that it constitutes an unrestricted license for wishful thinking." Hick, *Philosophy of Religion,* 65-66. This does not only incorrectly present James as encouraging us to believe in matters of religion whatever pleases us, it wrongly presents James's essay as offering a justification for the existence of God.

subjective criteria. Both his subjectivistic and objectivistic accounts of the justification of religious belief must be taken into consideration, if one wishes to be faithful to James's text. An interpretation that is faithful to James's text is one which takes into account what he says about both religion and science in the WB and elsewhere. The groundwork has now been laid to move to discussion of the WB.

James writes:

> The thesis I defend is, briefly stated, this:
> *Our passional nature not only lawfully may, but must, decide an option between propositions, whenever it is a genuine option that cannot by its nature be decided on intellectual grounds; for to say, under such circumstances, "Do not decide, but leave the question open," is itself a passional decision—just like deciding yes or no—and is attended with the same risk of losing the truth.*[66]

Whether James is defending a right or an obligation to believe rests on our understanding of 'lawfully may, but must'. Here he seems to be making a strong claim and a weak claim. The strong one is an obligation to decide an option and the weak one concerns a right to decide an option. There is no specification of the kind of hypotheses that are candidates for the will to believe thesis - though James's main concern is the application of the WB to religious hypotheses. Nevertheless, he introduces what he called above a 'genuine' option. He defines it as an option which is 'live', 'forced' and 'momentous'. Genuine options, in James's characterisations of them, concern what we are going to act or to perform, in practical terms, not merely what we may believe.

[66]James, 'The Will to Believe' in WB, 20.

An hypothesis, which is a candidate for belief, is a 'live' one, as against a 'dead' one, when it is worthy of the consideration of the individual. The liveliness or deadness of an hypothesis, James indicates, is measured by the individual's 'willingness to act.'[67]

A genuine option is one which is 'forced' not avoidable. By that James means that it is an option which is mandatory. When such an option is presented to us, we must make a decision. An avoidable option is one where it is possible for one to avoid choosing either hypothesis. An example of a forced option, James writes: "Either accept this truth or go without it."[68] There is no third option. James concludes his discussion of forced options by saying that "Every dilemma based on a complete logical disjunction, with no possibility of not choosing, is an option of this forced kind."[69] Accordingly, a forced option must satisfy two conditions: (1) the suggested alternatives must form a complete logical disjunction; and (2) that choice must be of either of the alternatives, that is, the possibility of not choosing either of them does not exist. A forced option, then would take the following form: Either believe T or do not believe T. You can either choose to believe T (accept it) or not to believe T. One might raise the objection that one can simply not believe one or the other. There is always the possibility of suspending judgement and avoiding making the choice between either alternative. If we are to do justice to James's claims about forced options, we must list the suspending of judgement in the side of not believing T. Hence, one alternative would be to believe T and the second alternative would be not of judgement is decided on intellectual grounds to believe T and the third would be the suspending judgement on T. The suspending, where there are no good reasons for favouring the other two alternatives. If the suspending of judgement is not a choice, then to say that the decision between believing T and not believing T cannot

[67]James, 'The Will to Believe' in WB, 14.
[68]James, 'The Will to Believe' in WB, 15.
[69]James, 'The Will to Believe' in WB, 15.

be made on intellectual grounds is to say that both alternatives are equivalent on intellectual grounds, i.e., that both alternatives are equally supported by evidence (logical or empirical). When the suspending of judgement is a possibility, then there are intellectual grounds for suspending judgement and not believing T. When a decision between alternatives cannot be made on intellectual grounds, there is always the possibility of suspending judgement on intellectual grounds.[70]

When James says:

> *"Do not decide, but leave the question open," is itself a passional decision—just like deciding yes or no—and is attended with the same risk of losing the truth.*[71]

he is suggesting that if one does not decide, i.e., if one suspends judgement, one's decision is (1) a passional one, and (2) would run the risk of losing the truth. This does not seem to be true. One's decision to suspend judgement might be based on either intellectual or passional grounds and, thus, one does not run the risk of losing truth. If one chose to believe T rather than not believing T on non-intellectual grounds, one would run the risk of being right or wrong. But one's decision to suspend judgement makes sure that truth is not lost for one. It protects one from believing wrongly and it guards one against believing correctly. But if one decides either to believe T or not to believe T, one runs the risk of equally being right or being wrong. Advising us in the above quotation not to suspend judgement, James is not doing away with this choice because it is not a plausible line to take, it is, rather, a position which the expense of adopting is too high to bear.

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[70]If for James, belief is measured by action, then both suspending judgement and disbelief, though theoretically different, would practically be equivalent. Hence, in terms of action, we only have two alternatives to choose from.

[71]James, 'The Will to Believe' in WB, 20.

The third characteristic of a genuine option is that it is 'momentous' and not 'trivial'. An option is trivial if nothing of particular significance hinges upon our deciding for it. A momentous option is one in which the opportunity is unique, a great deal is at stake and the decision is irreversible.[72] In contrast, a trivial option is one in which the opportunity is not unique, not much is at stake and the decision is reversible. James gives us as an example of a momentous option that of someone who was offered the chance of participating in Dr. Nansen's expedition to the North Pole.[73] What one must decide when confronted with this option is what to do within a limited period of time. One may never be asked again to join Dr. Nansen. One cannot change one's mind later. The consequences of joining the expedition are just too good to be missed and too much to lose if one decided against joining it. It seems that the only plausible thing to do is to join the expedition.

A genuine option that combines all three characteristics is an option where the consequences of choosing it are of vital significance for the individual. A genuine option is one where we fully recognise and thus admit the uncertainties that confront us and in such circumstances, we may, and must, follow the demands of practical rationality. Thus, such an option, James tells us, is one which cannot by its nature be decided on intellectual grounds. Intellectual grounds include both logical and empirical ones. What does it mean that a genuine option cannot by its nature be decided on intellectual grounds? Does it imply that it can never be decided on intellectual grounds? A religious hypothesis, James tells us, is one which "obviously cannot yet be verified scientifically at all."[74] We may take this statement as equivalent to saying that a religious hypothesis is one which cannot yet be decided on intellectual grounds. Hence, the religious hypothesis is a genuine option which we

[72]James, 'The Will to Believe' in WB, 15.
[73]James, 'The Will to Believe' in WB, 15.
[74]James, 'The Will to Believe' in WB, 30.

cannot now decide on intellectual grounds. This seems to go well with our discussion on types of beliefs, where we tried to show that for James, religious, metaphysical, aesthetic and moral principles are all propositions that are not yet verified. We accept them on the hope that they will be verified in the future in the same way that scientific propositions have already been verified. This point will be returned to later in the discussion, but now the discourse moves to examine two kinds of hypothesis to which the WB doctrine is applicable: the scientific hypothesis and the religious hypothesis.

6.3 SCIENTIFIC OPTION AND RELIGIOUS OPTION

James did not present his WB doctrine as a doctrine that is applicable to any specific kind of hypothesis. Granted his intention in WB to show how religious belief can be justified on the basis of the WB doctrine, he did not say, that the WB is applicable only to religious questions. In fact, the WB can be applied to any hypothesis provided that it satisfies the conditions stated above. James only excludes such situations as those in which believing something contradicts the available objective evidence whether empirical or logical. For these cases, the WB is not applicable. James writes:

> Can we, by any effort of our will, or by any strength of wish that it were true, believe ourselves well and about when we are roaring with rheumatism in bed, or feel certain that the sum of the two one-dollar bills in our pocket must be a hundred dollars? We can *say* any of these things, but we are absolutely impotent to believe them; and of just such things is the whole fabric of the truths that we do believe in made up—matters of fact, immediate or remote, as Hume said, and relations between ideas, which are either there or not there for us if we see them so, and which if not there cannot be put there by any action of our own.[75]

[75]James, 'The Will to Believe' in WB, 15-16.

This tells us that the hypotheses to which the WB is applicable are those for which objective evidence is not available now but may be obtained in future experience. Hence, the WB is not applicable to the examples just mentioned in the above quotation. For it can easily be verified that the man's belief about his health condition is false and that he has been deceiving himself about his health status. Thus, the WB doctrine is not applicable to such hypotheses or candidates for belief as can be falsified on evidentiary grounds.

In Part One, we have discussed how in certain scientific cases, James argued for the application of pragmatic criteria in choosing between competing scientific formulae or theories, when the choice cannot be made on evidential grounds. These situations where two or more competing theories are equally supported by objective evidence, are situations in which we are justified in applying subjective criteria such as elegance, simplicity and taste to help us to decide which theory to choose, that is, to use the Jamesian language in WB, our decision in these situations is made on non-intellectual grounds. Can we then describe these scientific situations as 'living', 'forced' and 'momentous'? Can the WB be exercised in these situations?

In my view, those situations, are ones which present themselves to us as forced, living and momentous. Indeed, especially in *Pragmatism,* James highlights the role of subjective factors in evaluating competing theories. His intention in *Pragmatism* was to show how subjective factors influence our systems of beliefs, which include beliefs of any kind. In the WB essay, however, James's aim was different. He was concerned with the problem of belief in advance of evidence (with the religious question especially in mind) and how to react when the evidence is not attainable for the moment. Here we find him trying to draw attention to the differences between

science and religion over the issue of evidence. We find him for example, saying something like this.

> Throughout the breadth of physical nature facts are what they are quite independently of us, and seldom is there any such hurry about them that the risks of being duped by believing a premature theory need be faced. The questions here are always trivial options, the hypotheses are hardly living (at any rate not living for us spectators), the choice between believing truth or falsehood is seldom forced. . . . What difference, indeed, does it make to most of us whether we have or have not a theory of the Röntgen rays, whether we believe or not in mind-stuff, or have a conviction about the causality of conscious states? It makes no difference. Such options are not forced on us.[76]

Also when James defined 'momentous' and 'trivial' options, he said that

> trivial options abound in the scientific life. A chemist finds an hypothesis live enough to spend a year in its verification: he believes in it to that extent. But if his experiments prove inconclusive either way, he is quit for his loss of time, no vital harm being done.[77]

What James wants to point out is that in most scientific cases the WB is not applicable. There are hypotheses which are neither living nor forced or momentous. But there are scientific situations to which the WB is applicable; where the scientist needs to believe in advance of the evidence.[78] The other point that James is making is that in religion the option is always genuine and the decision cannot be postponed until the evidence is attainable as is the case in science. In matters of religious belief we cannot afford not to decide. We must act and not wait till further evidence is obtained. For by doing so we are risking the loss of vital goods that follow upon our choice to hold religious belief.

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[76]James, 'The Will to Believe' in WB, 26.
[77]James, 'The Will to Believe' in WB, 15.
[78]See Putnam, *Renewing Philosophy,* 191-93. He gives examples of the application of the will to believe in science. Putnam is sympathetic to James's main claims in WB. He says: "Although this essay has received a great deal of hostile criticism, I believe that its logic is, in fact, precise and impeccable." 191-92.

Now, let us consider the religious belief, the justification of which is the main concern of the WB essay. James presents the religious question as a genuine option to which the WB is applicable.

> If I say to you: "Be a theosophist or be a mahomedan," it is probably a dead option, because for you neither hypothesis is likely to be alive. But if I say "Be an agnostic or be a Christian," it is otherwise: trained as you are, each hypothesis makes some appeal, however small, to your belief.[79]

What makes the first option a dead one for James while the second a live one? The first option is a dead one, for him, because neither of the two competing hypotheses is likely to fit coherently with his whole system of beliefs. The possibility for it to be rejected is high. The second option, in contrast, is a live one because at least one of the two hypotheses qualifies for consideration for belief; it initiates some interest for him to consider it. This option is also forced for James for he can see no other alternative hypothesis to compete with these two. He must decide to act on one or the other. The option is also momentous, for it involves a fundamental alteration in our expectations and hopes. It promises a certain amount of good that will enrich our life a great deal. This option cannot be chosen on intellectual grounds; it cannot be settled by the applications of the criteria of theoretical rationality. For neither speculative philosopher, theologians or agnostics have succeeded in providing conclusive evidence in support of their positions. Hence, the choice between Agnosticism or Christianity is for James a genuine option that cannot be decided on intellectual grounds. Thus, it may, and must, be decided on passional grounds, namely, by appealing to the criteria of practical rationality, whose two demands are met by the religious hypothesis.

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[79]James, 'The Will to Believe' in WB, 14.

James points out that in life, many of the options that we are presented with are not genuine. Some might be forced, but others are not as momentous as is the religious option. Hence his observation that we cannot bear the expense of not deciding because a great deal is at stake in such situations. The consequences of not deciding involve the risk of losing the chance of arriving at the truth in the midst of our attempt to avoid believing wrongly. James emphatically stresses 'the risk of losing truth', for the only way that the religious hypothesis is verified is by believing it. To clarify this notion of the verification of the religious hypothesis, our discussion in Part Two of absolute truth should be recalled.

We have seen that the experiences of individuals are the starting-point in James's account of truth and so it is in the case of religion; it begins with the personal, relative religious experiences of the individuals. As it is in truth, when James provided an explanation for objective truth on the basis of the subjective experiences of the individuals, in religion James also wanted to show how religion can be no less objective than truth and of course, science. One can detect here a certain mechanism of connecting the subjective with the objective which can be traced in his writings on science, truth and religion.

The nature of the religious hypothesis and its generality makes its verification somewhat different from the way that scientific hypotheses are empirically tested, though essentially similar. To show how James argues for this refer back to our discussion of absolute truth in Part Two. This has shown that the personal experiences of individuals are the starting-point in James's account of truth, and so it is in the case of religion; the personal, relative, religious experiences of individuals. In his pragmatic account of truth, James provides an account of absolute truth on the

basis of the subjective experiences of the individuals. In religion too, James is anxious to show how religion can be no less objective than science.

We have shown in Part Two that James was committed to the doctrine of degrees of truth. The way he links truth with verifiability and satisfactoriness, as the two conditions of truth, implies that both the verifiability and the satisfactoriness of beliefs have degrees. A relatively verifiable belief is one for which the empirical evidence might increase with various degrees over a period of time. The degree of verification of a belief is relative to the experiences of various individuals. The satisfactoriness of a belief also extends over a certain period of time and varies according to the different experiences of individuals. The same belief might be more satisfactory for one person than for another. For a person, the same belief might be at one time more satisfactory than at another time. But how can these personal and relative experiences contribute to the establishment of an objective and ideal order, be it a moral order or a religion?

Each individual acquires a certain number of experiences of the world that lead him to form beliefs which are verifiable and satisfactory. The experiences of one individual alone, however, cannot, because of their limitations, account for the formulation of certain beliefs over a long period of time. The sharing of the experiences of other individuals is crucial and vital for the establishment of a belief over a period of time. This requires some kind of co-operation among individuals which materialises in their sharing of their experiences through the social exchange of ideas and verifications. Hence, James tells us in *Pragmatism,*

> we exchange ideas; we lend and borrow verifications, get them from one another by means of social intercourse. All truth thus gets verbally built out, stored up, and made available for everyone.[80]

The implications of this form of activity are that individuals, through the sharing of their experiences are more likely to acquire beliefs which have an increasing degree of truth. Individuals will be more able to credit their beliefs with a higher degree of truth, to better account for their experiences and to predict further experiences. Hence, as time passes they tend to hold beliefs that are more objective; ones which at the highest level may not be refuted by any further experiences. At that level, truth reaches its ideal limit and becomes 'absolute'. The most significant point is that the objectivity of truth is arrived at by the subjective experiences of individuals which are conditioned by the criteria of verifiability and satisfactoriness.

Religion is one such case that expresses this harmony between the subjective and the objective. As it is the case with truth, the objectivity of the religious hypothesis is not obtained in one person's experience. Nor is it founded on a certain theoretical argument. It is based on the long term experiences of those who adopt the religious hypothesis in their lives. For the individual, the religious hypothesis is one which is subject to the empirical testing within the believer's own experience. The falsification of the religious hypothesis is not dependent on the individual's own empirical testing of it. For, as we have said earlier, the personal beliefs that the individual holds are only relative and subject to change over time. However, the accumulation of the experiences of individuals over a long period of time may be the means by which the confirmation of religious hypothesis is produced. Hence, the believers who act upon their religious hypothesis are collectively the ones whose conduct and action are likely to produce the confirmation of religious belief. The

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[80]James, PRAG, 102.

objective truth about religion may one day arrived at in this way. The objectivity of religion, as it is the case with truth and science, needs to be analysed in terms of the relative experiences of the individual believers. James describes the confirmation of the religious hypothesis as follows.

> [T]he verification of the theory which you may hold as to the objectively moral character of the world can consist only in this—that if you proceed to act upon your theory it will be reversed by nothing that later turns up as your action's fruit; it will harmonize so well with the entire drift of experience that the latter will, as it were, adopt it, or at most give it an ampler interpretation, without obliging you in any way to change the essence of its formulation.[81]

If, however, the religious hypothesis is false rather than true, then

> the course of experience will throw ever new impediments in the way of my belief, and become more and more difficult to express in its language. Epicycle upon epicycle of subsidiary hypothesis will have to be invoked to give to the discrepant terms a temporary appearance of squaring with each other; but at last even this resource will fail.[82]

The verification of the religious hypothesis is achieved by the experiences of the entire human race. The proof will be complete, James says, only "when the last man has had his say and contributed his share"[83] to the cumulative experiences of other individuals. Only then will the verification happen. One can see then that the nature of the religious hypothesis (and other hypotheses of similar generality) through its generality requires a verification in the long term, while the verification of the scientific hypothesis can be short term. The objectivity of religion, unlike that of science, depends to a great degree on the consensus of the believers.

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[81] James, 'The Sentiment of Rationality' in WB, 86.
[82] James, 'The Sentiment of Rationality' in WB, 86.
[83] James, 'The Sentiment of Rationality' in WB, 87.

We shall examine next how within the experiences of the individual believers, religious beliefs can be empirically verified. The objective account of religious claims which James gives is analysed in terms of the religious experiences of the believers. This James discusses in lecture XX, entitled 'Conclusions' and in the 'Postscript' to his monumental work on religious experience, VRE. We have seen that, in his WB, James was mainly concerned with highlighting the wide divide between religion and science on the issue of the justification of beliefs. In the VRE, we find him occupied with narrowing the gap between science and religion as much as possible.

7. INSTITUTIONAL RELIGION

James was convinced that the attempts by 'dogmatic theology' to establish the existence of God by arguments or to define both his metaphysical and moral attributes had deprived religion of its very essence, namely, the religious experiences of the individual believers. The outcome was a variety of empty abstractions that lack any support in the actual religious experiences of the individuals. An application of Peirce's principle of pragmatism, James tells us, shows us the meaninglessness of metaphysical attributes. Take for example the attribute of infinity. James asks: What is this particular attribute *known-as?* What is the practical difference for the believer that would result from its being true? None of these attributes, as James sees it, has any 'cash-value' for believers; they lack any support in the actual experiences of the believers.

> So much for the metaphysical attributes of God! From the point of view of practical religion, the metaphysical monster which they offer to our worship is an absolutely worthless invention of the scholarly mind.[84]

Moral attributes of God, such as holiness and goodness, James continues, are more significant than metaphysical attributes; they have definite relations to our practical life; they "positively determine fear and hope and expectation."[85] But dogmatic theology failed to prove that a God with such characters really existed. Thus, it failed to offer a solid foundation for religious sentiment. With regards to God's moral attributes, James tells us, dogmatic theology "stands with them as ill as with the arguments for his existence."[86]

For James, the religious hypothesis of God's existence is meaningless unless we can infer from it verifiable consequences in the world of facts. What make the difference between the proposition 'God exists' and the proposition 'God does not exist', are the consequences that follow from each and the consequences that follow for believers upon holding them. Both kinds of consequences determine the meaning of each proposition. If there were no consequences that would follow from the proposition that 'God exists' at all, and hence no difference in the world to be made, then, as James sees it, it is pragmatically equivalent to the proposition that 'God does not exist'. Hence, James is highly sceptical of any religious view that does not take into consideration the empirical consequences of the religious hypothesis. For example, he rejects what he calls 'universalistic supernaturalism' on the grounds that it takes the hypothesis of God to have no implications for the empirical world.

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[84]James, VRE, 353.
[85]James, VRE, 353.
[86]James, VRE, 353.

For James, it is only the empirical consequences of God in the natural world which provide some objectivity to the idea of God, no matter how remote those objective consequences may be. It is also the means by which the religious hypothesis can be shown to be more objective and less subjective; in line with objective scientific hypothesis. James even suggests the possibility of a critical 'science of religions'.[87]

> If she [philosophy] will abandon metaphysics and deduction for criticism and induction, and frankly transform herself from theology into science of religions, she can make herself enormously useful.[88]

James's remark is that religion is to become scientific rather than metaphysical. Whether philosophy could actually achieve that goal is the question. Care is needed when attempting interpretations of James's words here. His remarks about the task of philosophy to free religion from metaphysics ought to be understood only in the context of his suggestion to establish a science of religion. *If* religion can actually be divorced from metaphysics, then a science of religion might be established.[89]

8. THE SCIENCE OF RELIGIONS

We begin by asking: Is a 'science of religions' possible? The abandonment of the vacuous formulations of theology and the concentration on the 'cash-value' of the religious hypothesis in the actual religious experiences of the individual believers might be achieved in a series of steps that James tells us to follow.

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[87]James was familiar with works on the science of religions, which were published as early as 1869. In a letter to Charles Ritter, a friend of his from his days at the Geneva school, dated January 21, 1869, he says: 'I read the three last articles on "Science of Religions" by Émile Burnouf in the *Revue des deux mondes,* and *Religion* by Vacherot.' Perry, I, 291.

[88]James, VRE, 359.

[89]This line of thinking prevails in James's earlier work on psychology, where he attempts to divorce psychology from metaphysics in his project to establish psychology from the point of view of positivist science.

(1) The realisation that in the matter of religion, we are dealing with a plurality of religions. Each making different claims from the other which are in many cases inconsistent with each other. At this stage, James tells us, "Philosophy can by comparison eliminate the local and the accidental from these definitions. Both from dogma and from worship she can remove historic incrustations."[90]

(2) The realisation that some religious theses are often 'absurd or incongruous' from a scientific perspective.[91]

(3) We must identify the basic characteristics of religion. This involves getting rid of the intellectually problematic aspects of each religion with its local and historical characteristics and concentrating on what is common to all religions. Hence, we must extract from the different religious doctrines what may constitute their essential core.

(4) Once we have obtained the essential characteristics that are common to all religions, we can test the religious hypothesis empirically.

(5) These essential characteristics of all religions offer "mediation between different believers, and help to bring about consensus of opinion."[92] The success of philosophy in achieving this science of religions depends on its success in discriminating "the common and essential from the individual and local elements of the religious beliefs which she compares."[93]

James then formulates a set of religious beliefs which he presents as including the essential characteristics shared by all religions.

> 1. That the visible world is part of a more spiritual universe from which it draws its chief significance;
> 2. That union or harmonious relation with that higher universe is our true end;

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[90]James, VRE, 359.
[91]James, VRE, 359.
[92]James, VRE, 359.
[93]James, VRE, 359.

> 3. That prayer or inner communion with the spirit thereof—be that spirit 'God' or 'law'—is a process wherein work is really done, and spiritual energy flows in and produces effects, either psychological or material, within the phenomenal world.
>
> Religion includes also the following psychological characteristics:
>
> 4. A new zest which adds itself like a gift to life, and takes the form either of lyrical enchantment or of appeal to earnestness and heroism.
>
> 5. An assurance of safety and a temper of peace, and, in relation to others, a preponderance of loving affections.[94]

James pays special attention to the third aspect of religious life. The most important aspect of religious life is prayer. Prayer in a wide sense of the term, James tells us, is "the very soul and essence of religion."[95] The religious experience of prayer is the one aspect of religious life that is more likely to be confirmed empirically than the others. This religious phenomenon, James explains, consists in "the consciousness which individuals have of an intercourse between themselves and higher powers with which they feel themselves to be related."[96] It is "every kind of inward communion or conversation with the power recognized as divine."[97] James is not interested in the diverse forms of prayer which are practised in institutionalised religions. However, by abandoning the formal ways of worship, James is not claiming that these activities are lacking any religious feelings of some kind. His main concern in religion is the very personal experiences of the individuals rather than the varieties of formal ways of worship that are parts of many religions. These forms of worship, as far as he is concerned, are irrelevant to the inner experiences of the believers. When asked in a questionnaire[98] whether he prayed, James reported that he could not possibly pray because it made him feel 'foolish and artificial'.[99]

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[94]James, VRE, 382-83.
[95]James, VRE, 365.
[96]James, VRE, 366.
[97]James, VRE, 365.
[98]It is a questionnaire on the subject of religious belief, which was sent out by Professor James B. Pratt of Williams College in 1904. LWJ, II, 212-15.
[99]James, LWJ, II, 214.

The most important feature of prayer, James tells us, is the contact that the person who prays feels himself to be in with a spiritual object. Prayer is broadly understood by James to include any kind of communion. This 'communion' expresses itself best in prayer, not in rite or sacrifice, where "spiritual energy, which otherwise would slumber, does become active, and spiritual work of some kind is effected really."[100] Now, if the core of religion is the personal experiences of communion with a spiritual object, in what sense is it possible that these experiences could provide an empirical confirmation of religious claims?

James offers more than one answer to this question. There are he says:

(1) the feeling of a higher power that produces influences in oneself. This point is put clearly in the following quotation:

> [I]n this phenomenon [of communion] something ideal, which in one sense is part of ourselves and in another sense is not ourselves, actually exerts an influence, raises our centre of personal energy, and produces regenerative effects unattainable in other ways. If, then, there be a wider world of being than that of our every-day consciousness, if in it there be forces whose effects on us are intermittent, if one facilitating condition of the effects be the openness of the 'subliminal' door, we have the elements of a theory to which the phenomena of religious life lend plausibility. I am so impressed by the importance of these phenomena that I adopt the hypothesis which they so naturally suggest. At these places at least, I say, it would seem as though transmundane energies, God, if you will, produced immediate effects within the natural world to which the rest of our experience belongs.[101]

Indeed, it is only through the 'subliminal door', James says, that a higher power, if it exists, can be able to affect us;[102]

(2) the individual becoming aware of being in contact with a higher consciousness, which is continuous with one's own consciousness.

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[100]James, VRE, 376.
[101]James, VRE, 412.
[102]James, VRE, 198.

> *He becomes conscious that this higher part is conterminous and continuous with a more of the same quality, which is operative in the universe outside of him, and which he can keep in working touch with, and in a fashion get on board of and save himself when all his lower being has gone to pieces in the wreck.*[103]

Now to an examination in detail of these points that James claims to provide an empirical confirmation of religion. James's initial proposal is that in communion, the subconscious region of our consciousness, which he calls the subliminal consciousness, comes into union with a 'higher part', or the 'more'. He asks, what is the nature of this 'higher part'? He offers the following suggestion:

> Let me then propose, as an hypothesis, that whatever it may be on its *farther* side, the 'more' with which in religious experience we feel ourselves connected is on its *hither* side the subconscious continuation of our conscious life. Starting thus with a recognized psychological fact as our basis, we seem to preserve a contact with 'science' which the ordinary theologian lacks.[104]

James thinks that his proposal should satisfy the requirements of his fellow scientists, to whom his empirical explanation of the supernatural may well appear agreeable. Hence, he tells us that to keep in line with his 'science of religions' project, he chose to replace such terms as the 'more' and the 'union' with their references to particular theologies, with the more fitting term that would fit other types of faith, namely, the subliminal consciousness. He assures us that this entity is recognised nowadays as a "well-accredited psychological entity."[105] The empirical fact that the conscious person is continuous with a wider self is "a positive content of religious experience which . . . *is literally and objectively true.*"[106] On James's proposal, then, this higher power is reduced to a small region in one's own consciousness, namely the subliminal consciousness; avoiding thereby any reference

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[103]James, VRE, 400.
[104]James, VRE, 403.
[105]James, VRE, 402.
[106]James, VRE, 405.

to an independent divine being. The higher power with which the believer comes in contact in prayer is no more than one's own subjective deeper region of consciousness from which it comes. It is hard to see how this interpretation might satisfy the believer in that what he is aware of in his prayer comes down to no more than a deep region of his own consciousness.

However, James's own favoured explanation of the higher power goes far beyond this. His second proposal about its nature is likely to be more satisfactory than the first, from the point of view of the individual believer at least: it might be considered as less satisfactory than the first proposal by the scientist-philosopher. Let us now move on to a discussion of James's second proposal about the nature of the higher power. He adjusts his initial proposal by claiming that the religious experience of prayer does not come from the subliminal consciousness, nor is it reduced to it. It is rather the 'doorway' through which the experiences of the higher power may enter into the individual's consciousness. The subliminal consciousness is thus the 'mediating term' through its participation in both the individual's consciousness and the wider consciousness.

> [I]t is logically conceivable that *if there be* higher spiritual agencies that can directly touch us, the psychological condition of their doing so *might be* our possession of a subconscious region which alone should yield access to them.[107]

The higher power, the divine reality, is claimed to be an objectively higher level of consciousness in which we all, our consciousnesses, take part. We arrive at the objectively divine through the subliminal subconsciousness, the starting-point being the subjective experiences of the believers. James's suggestion about the continuity between the individual consciousness and the 'higher force' is based on denying any

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[107]James, VRE, 197.

metaphysical independence between these two types of consciousness. Accordingly, one cannot claim that he reduced the divine to the subjective states of the individual, as his initial suggestion implied.

James's hypothesis concerning the continuity between these two types of consciousness is based on his notion of the extension of the self. The self is an ever-flowing series of experiences, whose boundaries are in continual change. God, or the divine, is a wider series of experiences in which no boundaries exist between them. Hence, the individual subliminal consciousness links the self with the God or Gods. The reality of the divine lies in its being an extension of the self.

This 'higher force', James tells us, need not necessarily be one in number. Dogmatic theology takes God as one and infinite. James sees it as an equally plausible hypothesis that there is a multiplicity of finite Gods. He writes:

> The ideal power with which we feel ourselves in connexion, the 'God' of ordinary men, is, both by ordinary men and by philosophers, endowed with certain of those metaphysical attributes which in the lecture on philosophy I treated with such disrespect. He is assumed as a matter of course to be 'one and only' and to be 'infinite'; and the notion of many finite Gods is one which hardly anyone thinks it worth while to consider, and still less to uphold.[108]

James tells us that his account of religious experiences cannot be considered as unequivocally supporting the widely held hypothesis that God is one and infinite. All that it ascertains is the empirical fact that in religious experiences we come in contact with a larger consciousness which we access through our subconscious. That is all that religious experience can tell us. It neither favours nor supports any abstract

[108]James, VRE, 412-13.

formulation regarding the nature of this larger consciousness; its number, unity or magnitude.

> Meanwhile the practical needs and experiences of religion seem to me sufficiently met by the belief that beyond each man and in a fashion continuous with him there exists a larger power which is friendly to him and to his ideals. All that the facts require is that the power should be both other and larger than our conscious selves. Anything larger will do, if only it be large enough to trust for the next step. It need not be infinite, it need not be solitary. It might conceivably even be only a larger and more godlike self, of which the present self would then be but the mutilated expression, and the universe might conceivably be a collection of such selves, of different degrees of inclusiveness, with no absolute unity realized in it at all. Thus would a sort of polytheism return upon us—a polytheism which I do not on this occasion defend, for my only aim at present is to keep the testimony of religious experience clearly within its proper bounds.[109]

James seems to be presenting polytheism as an interpretative possibility. He refrains from examining it in VRE - though he gives the impression that polytheism is a thesis that he thinks worth taking seriously and that he intends to defend it himself. The empirical defence of polytheism rests on the premise that the believer's personal self is continuous with a wider self. Since there are many selves, then it is plausible to assume that there are many Gods which are continuous with the many selves that there are. The continuity thesis and also the problem of evil are the two main reasons for James's abandonment of the unity and omnipotence of the divine. Later in PU, he discusses polytheism very briefly while commenting on Fechner's polytheistic view of the superhuman consciousness as composed of distinct selves as 'very vague' and problematic. He says, "the word 'polytheism' usually gives offense, so perhaps it is better not to use it."[110] James still maintains, however, that the superhuman consciousness may be considered either polytheistically or monotheistically.[111] Then he suggests that the only escape from the complexities that surround the

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[109]James, VRE, 413.
[110]James, PU, 140.
[111]James, PU, 140.

monotheistic view of the universe, while avoiding polytheism, is "to be frankly pluralistic and assume that the superhuman consciousness, however vast it may be, has itself an external environment, and consequently is finite."[112]

The implicit motives behind abandoning the hypothesis of a supernatural being, which possesses among his many attributes those of oneness and omnipotence, are James's conviction that the assumption of an omnipotent supernatural being carries with it the assumption that there is one single, truest, point of view from which the universe could be made intelligible, which is the point of view of the higher consciousness. The plurality of religious experience makes it rather doubtful that the above hypothesis is true. For, according to the pluralistic hypothesis, the universe can be seen from a diversity of viewpoints which may be incompatible.

Given James's account of religious experience, all that he can afford to maintain on the basis of the empirical evidence available is that at certain moments we sense that our consciousness is continuous with a wider consciousness, bearing in mind his empirical and scientific commitments. Accordingly, any conception of God that he may adopt must be one which is developed on empirical base, from religious experience. James's God thus is finite, an empirical being, not a necessary one, and a co-operative member of our pluralistic universe. For James, the universe is represented in our religions as having a 'personal form.'[113] Relations among persons established on a basis of trust and intimacy, in order that these relations work, help to create a universe in which relationships are meaningful and life is worth living. Hence, religion, James says, represents the universe itself as a person; a Thou; he does not affirm the existence of God as an external being, as a Thou. In his later

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[112]James, PU, 140.
[113]James, 'The Will to Believe' in WB, 31.

work, especially in PU, James's position towards theism developed into a clear form of rejection to it. Hence, we find him describing his religious position, pluralistic pantheism, as 'a more intimate *Weltanschauung'*. According to his religious world-view, God can possibly be envisaged "as the indwelling divine rather than the external creator", and human life can be seen as "part and parcel of that deep reality."[114]

It is worth stressing that James is fully aware that no religion is infallible. He presents his position as an interpretative possibility, a point of view worth considering and taking seriously, but also one that might turn out to be mistaken in the end. As he argued in the WB, we had to proceed in religion 'at our own risk'. Religion is not much about a creator; an external being who enjoys certain attributes, it is more about a life that is worth living.

We must distinguish between James's treatment of religion in the VRE, with his project of the science of religions in mind, and his more metaphysical reflections on religion in his later writings, expanded especially in his PU. Our main concern here has been with his attempt to establish religion on empirical basis rather than with examining his later metaphysical views. Some remarks follow on James's treatment of religion as examined in the VRE.

The first obvious point that comes to mind is that the conception of God which James defends cannot be identified with the God of traditional theism. God as a finite empirical being neither omnipotent nor omniscient, can hardly be identified with the God that the ordinary believer within the Judeo-Christian tradition worships. Indeed, traditional theism has no commerce with a God with such attributes, whose

[114]James, PU, 19.

existence might terminate at one moment of time, just like all contingent beings. On the contrary, God, according to the divine religions, is a necessary non-empirical and infinite being, which is superior to all finite contingent beings.

A wider consciousness with which our consciousness is continuous is a contingent being, like our consciousness. From a psychological point of view, one can argue that within a person's religious life, one's belief in God, or the wider consciousness, might go through various stages of belief, doubt or abandonment of belief altogether. In these different stages, the contact between one's own consciousness and the wider consciousness might occur or lost and possibly regained. In such circumstances, one can say, from a psychological point of view, that when the contact was lost, God ceases to exist for the believer. In this sense, God might be considered as a contingent being, but only from a psychological point of view. One cannot conclude that from a metaphysical point of view God is contingent. Here James might be justifiably accused of confusion between God as an intentional object of the religious experience and God as the object of experience whose existence is independent of the believers' experiences of Him.

James might reply that this confusion does not threaten his position. His empirical account avoids making any ontological commitments concerning the existence of God. His account of God is one which is derived from experience and as far as he is concerned, what the believers feel to be in contact with, in their experiences, is a wider consciousness to which the unique categories that theology ascribes to God simply do not apply. In this sense, James's empirical account of God might be regarded by some as inadequate.

James was fully aware that his hypothesis about the wider consciousness may mean that it can be nothing more than a deeper region of our own consciousness. He was sure, however, that this does not imply that the believer's inner experiences of the wider consciousness are entirely subjective. For James, subjective experiences of a 'higher power' do refer to something which exists objectively outside the finite consciousness. Religious and mystical experiences point towards something which is outside our own consciousness. They are more than mere psychological phenomena; they point towards another region of fact.

We have seen that James's pluralistic hypothesis requires that God be finite.

> The line of least resistance, then, as it seems to me, both in theology and in philosophy, is to accept, along with the superhuman consciousness, the notion that it is not all-embracing—the notion, in other words, that there *is* a God, but that he is finite, either in power or knowledge, or in both at once.[115]

James's proposal of the finiteness of God has its roots in his position on the problem of evil. It is an undeniable empirical fact that evil exists; by the existence of suffering and evil in the world. If the goodness of God is to be retained, then his powers must be genuinely limited. This is the only way that James found he could deal with the problem of evil. Now his answer would surely be found unsatisfactory by many. It is beyond our discussion here to discuss the objections to James's position.

James consistently argued that the hypothesis of God, and other religious claims, must have some empirical consequences for the believer; ones which are not limited to the experiences of communion between the believer and a wider-consciousness or the divine. At the end of his 'conclusions', he states that:

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[115]James, PU, 141.

> What the more characteristically divine facts are, apart from the actual inflow of energy in the faith-state and the prayer-state, I know not. But the over-belief on which I am ready to make my personal venture is that they exist.[116]

In the 'Postscript' to the VRE, he makes similar remarks:

> If asked just where the differences in fact which are due to God's existence come in, I should have to say that in general I have no hypothesis to offer beyond what the phenomenon of 'prayerful communion,' especially when certain kinds of incursion from the subconscious region take part in it, immediately suggests.[117]

Now, James seems to be again 'in much hot water', over his project of establishing a science of religions. A science of religions, as he had clearly pointed out, requires that religious claims have empirical consequences in the physical world. Yet we find him unable to specify any of these consequences. The personal experiences of the believers are not sufficient for the provision of empirical evidence for religious claims.

9. CONCLUSION TO PART THREE

An attempt has been made in this part of the thesis to examine James's views on religious belief from his pragmatic viewpoint. To sum up this discussion of James's account, its main features which reflect his attempt to reconcile science and religion are now highlighted.

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[116]James, VRE, 408.
[117]James, VRE, 411-12.

(1) In addition to regarding both scientific propositions and religious propositions as similar in their origins, James also argued that a religious hypothesis, such as the hypothesis of God, is subject to empirical verification, just as is a scientific hypothesis. However, what distinguishes scientific hypotheses is that they may already have been verified, while religious hypotheses await verification. This kind of verification in the case of religious hypothesis is characterised by James as follows. He tells us in the VRE, that the experiences that he surveys are intended to persuade us that we might assume that connections with the divine may actually happen. On this assumption, he goes on to argue that there is a multiplicity of Gods which co-operate with us in a certain way. This hypothesis, he continues, can only be made true, verified in the long run, when enough people have held that view. Complete verification occurs when the consensus is total. So in the end, what establishes the credibility of this hypothesis is empirical evidence, namely, the support that the hypothesis might eventually gain through the believers believing it.

(2) The truth of the hypothesis of God, just as any scientific hypothesis, is determined by the satisfaction of the two conditions of truth, verifiability and satisfactoriness. In the case of the individual believer, a religious hypothesis might be adopted so long as it fits with the facts that might satisfy the scientific impulse. However, if this hypothesis no longer fits the facts, then it must be abandoned and another hypothesis sought to replace it. As for the kind of satisfaction sought, it is one which guarantees that the hypothesis of God "will combine satisfactorily with all the other working truths".[118]

(3) The will to believe is applicable to both religion and science. Its application is only legitimate when the choice between two or more competing hypotheses cannot

[118]James, PRAG, 143.

be made on objective grounds since all candidates are equally supported by empirical evidence. It can be noted that there has been a change of emphasis in the WB from VRE, the shift of focus from the subjective to the objective, without abandoning either. In WB, he assigns to subjective factors a role in the justification of religious belief which involves feeling and forms of satisfactions. The WB period was only a step towards his later pragmatism which allowed to subjective factors a role in determining all kinds of beliefs. In VRE, he was concerned with emphasising the way in which an empirical account of religion can be established by focussing on the religious experiences of the individual believer.

(4) Hence, we found him arguing that philosophy must abandon this futile approach to religion with its empty formulations and turns towards religious experience; determining its empirical consequences for believers. By granting priority in matters of religious belief to experience; the turn from metaphysics towards experience, may seem to relate positively to science, which from its origins has been marked by a move from authority and metaphysics to empirical competence.

(5) Through experience, God or religion becomes accessible to us, like any other physical phenomena. We can claim to know it or relate to it. If it were accessible to us, through experience, God, like any other physical phenomena is not beyond us. So James's approach is neither metaphysical, providing proofs of God's existence nor is it dogmatic, concerned with the examination of specific views about the divine or defending or attacking one or other of the institutionalised religions. James distanced himself from these attitudes to dealing with religion which he judged as simply irrelevant to his deepest concerns about the religious experiences of individuals.

(6) James also regards the hypothesis of God, like any other scientific hypothesis, as only probable. This position seems to be consistent with his empiricism which is

> contented to regard its most assured conclusions concerning matters of fact as hypotheses liable to modification in the course of future experience.[119]

Hence, just as judgements concerning matters of fact are provisional and subject to further testing, so that movement closer to the ultimate limit becomes possible, so is the case with regard to the existence of God. Like any statement of fact, it is only probable, even if the degree of the probability of His existence may be high. Just like any other scientific hypothesis, the hypothesis of God is subject to verification, as explained above. Hence James's characterisation of God as internal to the world and finite.

[119]James, WB, 5.

CONCLUSION

The main aim of this work has been to attempt to show how James incorporated certain scientific insights into his pragmatic philosophy. The focus has been on the impact of his view of science on the questions of truth and religious belief. It has been shown that James's view of the nature of science as not absolute, and only probable, had influenced his philosophical outlook.

Little attention has been paid to other aspects of his philosophy, for example, his views on morality and his later writing on metaphysics. Similarily, little attention has been given to the writings of other pragmatists, most notably Peirce.

It seemed at the outset more in line with the aim of the present work to focus mostly on the interpretation of James's ideas. However, having examined his position on the issues mentioned, it later seemed more appropriate for a further understanding of James to examine how his views stood in relation to Peirce's. It would be worthwhile investigating the differences between their views on the nature of science, given James's insistence that science can never attain certainty and Peirce's confidence in

scientific inquiry. This might well be the ground of their disagreements over pragmatism.

James's ideas are reported to have influenced the thinking of Niels Bohr at some stage, especially the former's views in PP concerning the claim of the wholeness or unity of conscious thought and also his pragmatism. However, in the scientific literature, one can only find comments on Bohr's reading of James. The writers confine themselves in most cases to citing the controversy over the exact date on which Bohr had read James.[1] Bohr himself recorded his admiration for James's views in PP in the last interview with him on the day before he died. One interesting comparison that would be worth investigating is that between Bohr's notion of complementarity and James's view on the interaction between the subject and the object in the production of experience.

[1]See the references to James and Bohr in Holton, 'The Roots of Complementarity', Folse, *The Philosophy of Niels Bohr: The Framework of Complementarity,* Jammer, *The Conceptual Development of Quantum Mechanics* and Stapp, *Mind, Matter, and Quantum Mechanics.*

APPENDIX
ENGLISH TRANSLATIONS OF FRENCH PASSAGES

I. Delbœuf, J., "Déterminisme et Liberté: La Liberté Démontrée Par La Mécanique", *Revue Philosophique XIII,* 453-480, 608-638, 1882, XIV, 156-189, 1882.

(1) "En d'autres termes, l'excercice de la liberté, si la liberté existe, implique-t il une création de force?

John Herschell, entre autres, l'a pensé. Il dit en quelque endroit qu'on est bien forcé d'avouer que la force peut être créée à nouveau, et, partant, de n'accorder au principe de la conservation de l'énergie que la valeur d'une loi approximative.

Hàtons-nous de donner une réponse négative à la question.

Scientifiquement parlant, il nous est tout aussi impossible de concevoir une création de force qu'une création de matière. Les corps animés, aussi bien que les corps inanimés, sont incapables de créer le mouvement. Leurs déplacements, et les déplacements qui en résultent pour les autres corps, s'expliquent par une simple transformation ou un simple transport de forces." (I, 478-79)

(In other words, does the exercise of freewill, if freewill exists, imply the creation of energy?

John Herschell and others thought so. He says somewhere that one is indeed forced to admit that energy can be newly created, and, from this, only to grant to the principle of the conservation of energy an approximate value to the law.
Let us hasten to give a negative reply to the question.

Scientifically speaking, it is as completely impossible for us to conceive the creation of energy as to conceive of the creation of matter. Animate bodies, as well as inanimate bodies, are incapable of creating movement. Their change of position, and the changes which follow for other bodies, are explicable as a simple transformation or a simple transferring of energy.)

(2) "Ou l'homme a ce pouvoir, ou il n'est pas libre. Ce résultat, comment peut-il l'atteindre sans compromettre la loi de la conservation de l'énergie? en disposant du temps." (I, 480)

(Either man has this power, or he is not free. How can this result be attained with compromising the law of the conservation of energy? in the choice of time.)

(3) "Mais, s'il était nécessaire d'accorder à la volonté une part d'action sur les choses, il était impossible d'admettre qu'une force nulle pût, à l'aide d'aucun mécanisme, produire un effet quelconque. Quelle puissance restait-il donc à mettre à la disposition des êtres libres? Une seule, le temps. Agir librement, c'est suspendre son activité." (III, 188)

(But, if it is necessary to accord to the will a share of the action on things, it is impossible to admit that a non-existent force is able to produce, with the help of any mechanism, such an effect. What power remains then to put at the disposition of free beings? One only: time. To act freely is to suspend one's activity.)

(4) "le libre arbitre n'a rien à voir avec le principe de la conservation de l'énergie. Qu'on le veuille ou qu'on ne le veuille pas, la quantité d'énergie reste

nécessairement la même. . . . Libres ou non, l'homme et les animaux ne font que convertir sans cesse du transformable en intransformable; ils précipitent le cours les choses. . . . Il est possible, il est même probable que les pensées et les sentiments et les volontés sont accompagnés d'une dépense d'énergies; mais le principe de la conservation de l'énergie n'est nullement intéressé dans la question de la liberté." (II, 617-18)

(Arbitrary freewill has nothing to do with the principle of the conservation of energy. Whether one wishes it or not, the quantity of energy necessarily remains constant. Free or otherwise, man and animals can only convert ceaselessly from transformable into intransformable: they precipitate the course of events. . . . It is possible, even probable, that thoughts and feelings and wills are accompanied by an expenditure of energy, but the principle of the conservation of energy is not at all concerned with the question of freewill.)

(5) "Il y a donc certainement des mouvements discontinus, et ce sont précisément des mouvements volontaires. Nous pouvons en inférer que tous les mouvements volontaires sont discontinus." (II, 634)

(There are thus certainly discontinuous movements, and these are exactly freely chosen movements. From this we can infer that all freely chosen movements are discontinuous.)

(6) "A la science de la nature se substitue la recherche de la pensée et de la volonté créatrices. Cette pensée d'ailleurs et cette volonté sont immuables et éternelles comme les lois de la matière. Au point de vue exclusif où je me suis placé, je n'ai pas à critiquer ce système, que je déclare irréfutable. Il me suffit d'avoir montré que la science est obligée de recourir à la liberté pour expliquer les mouvements discontinus." (II, 638)

(For the science of nature is substituted that of research on thought and the creative will. In any case, this thought and this will are immutable and eternal like the laws of matter. From the single point of view at which I stand, I have no criticism of the system, which I claim to be irrefutable. It is enough for me to have shown that science is obliged to have recourse to freewill to explain discontinuous movements.)

II. Renouvier, C. 1875. *Essais de Critique Générale. Deuxième Essai: Traité de Psychologie Rationnelle D'après Les Principes du Criticisme.* Tome Deuxième. Paris: Au Bureau de La Critique Philosophique.

(7) "La liberté que nous pouvons admettre est ce caractère de l'acte humain, réfléchi et volontaire, dans lequel la conscience pose étroitement unis le motif et le moteur identifiés avec elle, en s'affirmant que d'autres actes exclusifs du premier étaient possibles au même instant. Cette possibilité, apparente ou réelle d'ailleurs, est le titre le plus net de la liberté, l'élément le plus clair de sa définition." II(73-4).

(The liberty, which we can accept is this character of the human act, reflective and voluntary, in which consciousness is closely united with the motive and the motor identified with it, whilst affirming that other exclusive first acts were possible at the same instant. This apparent or real possibility is the clearest title of liberty, the clearest element in its definition.)

(8) "Les actes libres ne sont pas des effets sans cause ; leur cause est l'homme, dans l'ensemble et la plénitude de ses fonctions." II(86-87).

(Free acts are not effects without cause; their cause is man, in the totality and fullness of his functions.)

(9) " . . . qui dit loi entend nécessité. Rien de plus vrai et de plus légitime." (II, 83)

(Who says law implies necessity. Nothing is truer or more legitimate.)

(10) *"Le motif prépondérant détermine la volonté,* on essaie d'introduire un énoncé à termes pleins et synthétiques, on trouve : *L'état formé de passion, d'intelligence et de volonté, duquel fait partie la représentation d'un motif jugé capable de déterminer un acte subséquent, détermine effectivement ce dernier acte. . . . La volonté est à elle-même son motif."* II(72)

(The preponderant motive determines the will, if one tries to introduce a statement in complete and synthesised words, one finds: The state formed from passion, from intelligence and from freewill, which is part of the representation of a reasoned motive capable of determining a subsequent act, determines effectively this last act. . . . Freewill is itself its motive.)

(11) "Ces objections contre le système de la nécessité sont d'une grande force. Elle établissent en substance que le jugement de liberté est une donnée naturelle de la conscience et se lie à nos jugements réfléchis pratiques, dont il est même le fondement. C'est aussi ce que nous avons dû reconnaître dans l'analyse des fonctions volontaires.

Toutefois il n'en résulte aucune preuve logique de la réalité de la liberté. En effet, quand il s'agit des fonctions intellectuelles et sensitives, on distingue entre les phénomènes de conscience et la réalité de leurs objets, c'est-à-dire entre ces phénomènes, dont on ne doute point, et l'accord où ils sont peut-être, et peut-être ne sont pas, avec l'ensemble des groupes et séries de l'expérience. Ici, la distinction n'est pas moins justifiée, et toute vérification de l'accord ou du désaccord est en outre impossible." II(61)

(These objections to the system of necessity are forceful. They establish substantially that the judgement of freewill is a natural given of consciousness, which is linked to our considered practical judgements, of which it is the very foundation. It is also what we have had to recognise in the analysis of freely chosen functions.

All the same, no logical proof derives from this of the reality of freewill. In fact, when it is a question of intellectual and sensitive functions, one distinguishes between the phenomena of consciousness and the reality of objects, that is to say, between these phenomena, which no one doubts, and the agreement that they are perhaps, or perhaps not, in the totality of the groups and series of experience. Here, the distinction is not less justified and any verification of agreement or disagreement is furthermore impossible.)

(12) "En résumé, la thèse de la liberté n'est pas démontrable logiquement, non plus que celle de la nécessité." II(89)

(In brief, the thesis of freewill is not logically demonstrable, no more than that of necessity.)

(13) "Après tout ce que j'ai dit en plusieurs lieux, et sous divers points de vue, de la probabilité d'existence d'une volonté libre, ou source de déterminations premières dans l'homme, et de l'impuissance où nous sommes néanmoins d'en obtenir une preuve de fait ou une démonstration logique, il est clair que la solution du problème ne peut plus être demandée qu'à la raison pratique. C'est une affirmation morale qu'il nous faut; toute autre supposerait aussi celle-là. En d'autres termes, la raison pratique doit poser son propre fondement et celui de toute raison réelle, car la raison ne se scinde pas : la raison n'est, selon notre connaissance, autre chose que l'homme, et l'homme n'est jamais que l'homme pratique." II(322)

(After all that I have said in many places, and from diverse points of view, of the probability of the existence of freewill, or the source of first determinations in man,

and our complete inability to obtain an empirical proof or a logical demonstration, it is clear that the solution to the problem can only be asked of practical reason. It is a moral affirmation that we require; everything else posits that. In other words, practical reason must provide its own foundation and that of all real reason, for reason is not divisible: reason is not, to our knowledge, anything other than man, and man is never other than practical man.)

(14) *"Impossibilité de démontrer la liberté, aussi bien que de démontrer la nécessité.* Si la thèse de la nécessité, par le scepticisme absolu auquel elle conduit, provoque cette «révolte de l'être entier» dont on a essayé de donner l'aperçu, en revanche la thèse de la liberté ne permet pas non plus à l'esprit de se reposer dans un savoir acquis démonstrativement. La liberté ne se démontre pas ; elle ne se constate pas davantage à la manière d'un fait, attendu que l'expérience n'atteint pas les possibles comme réels, mais seulement, ce qui est bien différent, la croyance qu'on en a, quand on l'a. «Elle est la condition *nécessaire* qui rend *possible* l'œuvre à la fois imparfaite et admirable de la connaissance humaine et l'œuvre du Devoir qui en découle, et c'est assez peut-être pour nous assurer qu'elle n'est pas une vaine conception de notre orgueil." II(418-19)

(Impossibility of demonstrating freewill, as well as of demonstrating necessity. If the thesis of necessity, by the absolute scepticism to which it leads, provokes this "revolt of the whole being", into which an attempt has been made to give insight, in contrast neither does the thesis of liberty allow the spirit to rest in demonstrably acquired knowledge. Free will does not demonstrate itself, no more than can a fact establish itself, given that experience does not attain the possibles as the reals, but only, which is quite different, the belief that one has of it, when one has it. "It is the necessary condition which makes possible the task both imperfect and admirable of human knowledge and the task of Duty which derives therefrom, and it is enough perhaps to assure us that it is not a vain concept of our pride.)

(15) "S'il en était ainsi, par la liberté comme par la nécessité, quoique sur des motifs tout contraires, la spéculation sortirait des voies de la raison pratique, du moins de celles qu'avouent les honnêtes gens de nos jours, et pour arriver aux mêmes conséquences funestes. Il semblerait dès lors qu'un parti moyen entre la liberté et la nécessité serait le plus utile, et le plus propre à dégager la morale. Mais un tel parti n'est tenable, s'il l'est, que pour le mystique, pour celui qui, sans s'arrêter à la contradiction, sape les fondements de la science, ensuite n'établit rien de net et de compréhensible. La liberté et la nécessité ne sauraient être ni simultanément vraies, ni simultanément fausses, car, de deux choses l'une, ou les actes humains sont *tous et totalement* prédéterminés par leurs conditions et antécédents, ou ils ne le sont pas *tous et totalement.* C'est ainsi que se pose la question logique. Le doute serait donc notre seule ressource : mais le doute ne nous tire point de peine quant à la morale : s'il est souvent légitime en face des théories, il est la mort de l'âme dans les choses pratiques et touchant toute croyance d'où dépend la conduite de la vie." (II, 330-31)

(If that was the case, with freewill as with necessity, although from conflicting motives, speculation springs from the paths of practical reason, at least those avowed by the honest men of our age, and thus to reach the same fatal consequences. It seems from this that a middle road between freewill and necessity would be more useful, and more appropriate to redeem ethics. But such a position is not tenable, if it exists, other than for the mystic, for whom, without stopping at the contradiction undermines the foundations of science, thereafter establishing nothing either clear or comprehensible. Freewill and necessity could not possibly either be simultaneously true, or simultaneously false, for, of the two things, one, either the human acts are all and completely predetermined by their conditions and antecedents, or they are not completely and totally. It is thus that logic poses the question. Doubt would then be our only resource: but doubt hardly takes us out of the difficulty as to ethics: if it is often legitimate in the face of theories, it is the death of the soul in practical things and touches on all belief on which depends the conduct of life.)

(16) "Dans l'impuissance de rien démontrer, l'unique ressource qui reste est d'affirmer la liberté à titre de postulat. La vérité, non pas prouvée, mais réclamée et digne d'être choisie, est celle qui pose un fondement pour la morale et aussi un fondement pour la connaisance pratique, indépendamment de laquelle on ne peut asseoir «la science.»" II(419)

(Powerless to demonstrate anything, the solitary resource which remains is to affirm freewill as a postulate. The truth, unproven, but claimed and worthy of choice, is that it gives a foundation for ethics and also a foundation for practical knowledge, independently of which "science" cannot be established.)

ABBREVIATIONS USED FOR WORKS BY JAMES

ML	*Manuscript Lectures*
MEN	*Manuscript Essays and Notes*
ECR	*Essays, Comments, and Reviews*
VRE	*The Varieties of Religious Experience: A Study in Human Nature*
PBC	*Psychology: Briefer Course*
EP	*Essays in Psychology*
PP	*The Principles of Psychology* (followed by volume number)
WB	*The Will to Believe and Other Essays in Popular Philosophy*
SPP	*Some Problems of Philosophy: A Beginning of an Introduction to Philosophy*
EPH	*Essays in Philosophy*
PU	*A Pluralistic Universe: Hibbert Lectures at Manchester College on the Present Situation in Philosophy*
ERE	*Essays in Radical Empiricism*
MT	*The Meaning of Truth*
PRAG	*Pragmatism*
LWJ	*The Letters of William James.* (followed by volume number)

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